ALAMEDA COUNTY
Community Development Agency

PLANNING DEPARTMENT

December 2010

OAKLAND INTERNATIONAL AIRPORT

Airport Land Use Compatibility Plan



OAKLAND INTERNATIONAL AIRPORT

Airport Land Use Compatibility Plan

DECEMBER 15, 2012

Prepared for the

Alameda County ALUC

BY

ESA

2600 Capitol Avenue, Suite 200
Sacramento, CA 95816
916.564.4500
www.esassoc.com

Los Angeles Oakland Olympia Petaluma
Portland San Diego San Francisco
Seattle Tampa Woodland Hills

TABLE OF CONTENTS

Oakland International Airport
Land Use Compatibility Plan

		Page
1.	**Introduction**	**1-1**
1.1	Plan Overview	1-1
	1.1.1 Function and Applicability of the Plan	1-1
	1.1.2 Statutory Requirements	1-2
	1.1.3 Alameda County Airport Land Use Commission	1-4
	1.1.4 Relationship of the ALUC to County and City Governments	1-4
1.2	Policy Framework	1-5
	1.2.1 State Laws and Guidelines	1-5
	1.2.2 Relationship to Airport Master Plan and Airport Layout Plan	1-6
1.3	Plan Implementation	1-6
	1.3.1 General Plan Consistency	1-6
	1.3.2 Project Referrals	1-7
1.4	Plan Contents	1-7
2.	**County-wide Policies**	**2-1**
2.1	Introduction	2-1
2.2	ALUCP Lifecycle	2-1
2.3	Effective Date	2-2
2.4	Definitions	2-2
2.5	Geographic Scope	2-4
	2.5.1 Airport Influence Area	2-4
	2.5.2 County-wide Impacts on Flight Safety	2-4
	2.5.3 New Airports	2-4
	2.5.4 Heliports and Helipads	2-5
2.6	Types of Plans and Actions Requiring ALUC Review	2-6
	2.6.1 Actions Requiring ALUC Review	2-6
	2.6.1.1 Land Use Plans and Zoning Ordinances	2-6
	2.6.1.2 Airport and Heliport Plans	2-7
	2.6.2 Land Use Actions Recommended for ALUC Review	2-8

Page

2.7 Review Process 2-9
2.7.1 General 2-9
2.7.2 Public Noticing 2-9
2.7.3 Review Process for Land Use Plans and Zoning Ordinances 2-10
2.7.3.1 Initial Review of General Plan Consistency 2-10
2.7.3.2 ALUC Action Alternatives 2-10
2.7.3.3 Response Time 2-11
2.7.3.4 Review Criteria 2-11
2.7.4 Review Process for Airport and Heliport Actions 2-12
2.7.4.1 Project Submittal Information 2-12
2.7.4.2 ALUC Action Alternatives for Reviews of New Airports and Heliports 2-13
2.7.4.3 ALUC Action Choices for Plans of Existing Airports or Heliports 2-13
2.7.4.4 Response Time 2-13
2.7.4.5 Review Criteria for New Airports or Heliports 2-14
2.7.4.6 Review Criteria for Airport Master Plan, Layout, and Development Plans 2-14
2.7.4.7 Consistency Determination Criteria for master or Development Plans 2-15
2.7.5 Review Process for Proposed Land Use Actions 2-15
2.7.5.1 Information Required for Review of Proposed Individual Project 2-15
2.7.5.2 ALUC Administrative Officer's Alternatives 2-17
2.7.5.3 ALUC Action Alternatives 2-18
2.7.5.4 Response Time 2-18
2.7.5.5 Subsequent Review 2-18
2.7.5.6 Basic Land Use Compatibility Criteria 2-19
2.7.5.7 Special Conditions 2-22

3. Oakland International Airport Policies 3-1
3.1 Purpose and Scope 3-1
3.1.1 Airport Influence Area (AIA) 3-1

3.2 Compatibility Factors and Zones 3-2
3.2.1 Noise Impact Zones 3-2
3.2.2 Safety Zones 3-2
3.2.3 FAR Part 77 Surfaces (Airspace Protection) 3-7
3.2.4 Overflight Zones 3-7

3.3 Compatibility Policies 3-7
3.3.1 Noise 3-7
3.3.1.1 Objective 3-7
3.3.1.2 Evaluation 3-7
3.3.1.3 Measurement 3-7
3.3.1.4 Factors Determining Noise Criteria 3-8
3.3.1.5 Appropriate Noise Levels for Specific Types of Land Use Development 3-8
3.3.1.6 Interior Noise Levels 3-8
3.3.1.7 Engine Run-up and Testing Noise 3-9
3.3.2 Safety 3-11
3.3.2.1 Objective 3-11

Page

3.3.2.2 Evaluation 3-11
3.3.2.3 Measurement 3-11
3.3.2.4 Factors Determining Safety Criteria 3-11
3.3.2.5 Airport Safety Zones 3-12
3.3.2.6 Residential Development Criteria 3-13
3.3.2.7 Nonresidential Development Criteria 3-13
3.3.2.8 Land Uses of Particular Concern 3-14
3.3.2.9 Mixed-Use Development 3-15
3.3.2.10 Criteria for Clustering Development 3-16
3.3.2.11 Open Land 3-16
3.3.3 Airspace Protection 3-21
3.3.3.1 Objective 3-21
3.3.3.2 Evaluation 3-21
3.3.3.3 Measurement 3-21
3.3.3.4 Factors Determining Airspace Protection Criteria 3-21
3.3.3.5 FAA Notification 3-22
3.3.3.6 Obstruction Marking and Lighting 3-22
3.3.3.7 Other Flight Hazards 3-22
3.3.3.8 Avigation Easement Dedication 3-23
3.3.4 Overlight 3-24
3.3.4.1 Objective 3-24
3.3.4.2 Evaluation 3-24
3.3.4.3 Measurement 3-24
3.3.4.4 Factors Determining Overflight Criteria 3-24
3.3.4.5 Overflight Notification 3-25
3.3.4.6 Buyer Awareness Measures 3-25

4. Oakland International Airport and Vicinity Data 4-1
4.1 Introduction 4-1

4.2 Surrounding Airport Environs 4-1
4.2.1 Jurisdictions 4-1
4.2.2 Surrounding Land Uses 4-2
4.2.3 Alameda County Land Uses 4-3
4.2.4 Noise-Sensitive Land Uses 4-3
4.2.5 Future Airport Vicinity Land Uses 4-6

4.3 Land Use Regulations and Policies 4-6
4.3.1 City of Oakland General Plan Land Use and Transportation Element, Adopted March of 1998, Amended through 2015 4-6
4.3.2 City of Oakland General Plan Noise Element, Adopted June 2005 4-7
4.3.3 City of San Leandro General Plan, Adopted in 2002, Amended Through 2015 4-8
4.3.4 City of Alameda General Plan, Adopted in 1991, Amended Through 2010 4-9
4.3.5 City of Hayward General Plan, Adopted 2002, Amended through July 15, 2003 4-9
4.3.5.1 City of Hayward Noise Element Policies 4-10
4.3.6 Eden Area Plan, Alameda County, California, Updated March 2010 4-11

Page

4.4 Existing Airport Land Uses 4-11
4.4.1 North Field 4-11
4.4.2 South Field 4-11
4.4.3 Typical Flight Procedures 4-12

4.5 Proposed Airport Facility Improvements 4-15
4.5.1 Airfield 4-15
4.5.2 Building Area 4-15

4.6 Airport Planning Documents 4-16
4.6.1 Oakland International Airport Master Plan 4-16

4.7 Existing and Future Airport Activity 4-16
4.7.1 Fleet Mix 4-16
4.7.2 Runway Use 4-16

5. References 5-1

Appendices

A. California Airport Land Use Commission Laws - Public Utility Code Section 21670 A-1
B. Airport Land Use Compatibility Concepts B-1
C. Federal Aviation Regulations, Part 77 C-1
D. Methods for Determining Concentrations of People D-1
E. Sample Implementation Documents E-1
F. Consistency Checklist F-1
G. Heliport Design G-1
H. Glossary H-1
I. Real Estate Disclosure Law and Legislation I-1

List of Figures

1-1 Alameda County Airports 1-3
3-1 Airport Influence Area 3-3
3-2 HWD and OAK Influence Area Overlap 3-5
3-3 Noise Compatibility Zones 3-27
3-4 Safety Compatibility Zones 3-29
3-5 FAR Part 77 Surfaces 3-31
3-6 Overflight Compatibility Zones 3-33
4-1 General Plan Land Use Designations in the Vicinity of Oakland International Airport 4-4
4-2 Generalized Existing Zoning in the Vicinity of Livermore Municipal Airport 4-5
4-3 Airport Layout Plan 4-13

List of Tables

2-1 Heliports in Alameda County 2-5
2-2 Information Required for ALUC Review of Proposed Land Use Actions 2-16
2-3 Basic Compatibility Criteria for Airports in Urban and Rural/Suburban Areas 2-20

		Page
3-1	Noise Compatibility Criteria	3-10
3-2	Safety Compatibility Criteria	3-17
4-1	Existing and Forecasted Based General Aviation Fleet Mix	4-16
4-2	Projected Operations by Aircraft Type	4-17
4-3	Airline Passenger and Air Cargo Forecasted Operations	4-17

This page left intentionally blank.

CHAPTER 1
Introduction

1.1 Plan Overview

The State Aeronautics Act (Public Utilities Code, Section 21670 *et seq.*) requires the preparation of an airport land use compatibility plan (ALUCP) for nearly all public-use airports in the state (Section 21675). The intent of the ALUCP is to encourage compatibility between airports and the various land uses that surround them. Alameda County (the County) has established an airport land use commission (ALUC), in accordance with state law, to prepare land use compatibility plans for all public-use airports in the County and to review general plans, proposed changes to zoning codes and ordinances, land use actions and development projects, and airport development plans for consistency with compatibility policies.

1.1.1 Function and Applicability of the Plan

The *Oakland International Airport Land Use Compatibility Plan* is the primary document used by the Alameda County ALUC to help promote compatibility between Oakland International Airport (OAK) and its environs. More specifically, this ALUCP should act as a guide for the ALUC and local jurisdictions in safeguarding the general welfare of the public as OAK and the areas surrounding the Airport grow. This document shall also serve as a tool for the Alameda County ALUC in fulfilling its duty to review airport and land use development proposals within the airport influence area (AIA) or referral area associated with the airport.

The compatibility criteria set forth in this document shall be used by local agencies to prepare and amend land use plans and ordinances. California State law dictates that the County and affected cities modify their general and specific plans to be consistent with the ALUC's plan, or to take steps to overrule the ALUC. The AIA for OAK includes portions of the cities of Alameda, Oakland, San Leandro, Hayward, and unincorporated areas of the County; as such, this document is applicable to both cities and Alameda County as they prepare land use plans and review development proposals within the AIA. This document also applies to any future area that may be incorporated within any part of the AIA, as well to school districts, community college districts, and special districts, whenever these entities consider the development of new facilities or expansion of existing ones. Finally, this document should also be considered by land owners when proposing projects within the AIA.

This document replaces the *Alameda County Airport Land Use Policy Plan (ALUPP)*, which the ALUC adopted in 1986. Alameda County includes three public use airports: OAK, Livermore Municipal Airport (LVK), and Hayward Municipal Airport (HWD). This compatibility plan addresses only the AIA associated with OAK. Separate compatibility plans have been prepared for HWD and LVK (see Figure 1-1 for airport locations). This ALUCP is based on a long-range master plan and airport layout plan (ALP) for OAK that reflects the expected growth of the Airport over a 20-year period.

1.1.2 Statutory Requirements

Powers and Duties

ALUCs are established pursuant to the State ALUC law[1] to protect the public health, safety, and welfare by promoting the orderly expansion of airports and adoption of land use measures by local public agencies to minimize exposure to excessive noise and safety hazards near airports. In accordance with Section 21674(b) of the California Public Utilities Code, an ALUC has the authority "to coordinate planning at the state, regional and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare"; to prepare and adopt airport land use plans; and to review and make recommendations concerning specified plans, regulations and other actions of local agencies and airport operators. In addition, ALUCs review plans for proposed new airports or heliports.

Limitations

State law does not authorize ALUCs to zone property or apply other land use controls normally exercised by local public agencies. Because the jurisdiction of the ALUC is limited to new land uses, existing land uses that are in conflict with or affected by existing or anticipated airport operations are not subject to the policies established by the ALUC. However, existing incompatible uses are the concern of the airport and of the city or county having jurisdiction over the affected area, and policies should be developed to address this problem. The term "existing land uses" is further defined in Chapter 2.

State law does not provide ALUCs with jurisdiction over airport operations, although the ALUCP must include assumptions about future operations at each airport. Once adopted, the ALUCP serves as a framework for reviewing significant proposals for further airport development.

ALUC jurisdiction and ALUCP scope are confined to land use-related primary impacts on the area surrounding the airport. This excludes the ALUC from considering air quality impacts of the airport, and other "secondary" impacts such as traffic or air quality impacts caused by airport operations.

[1] The State ALUC law is contained in Public Utilities Code Article 3.5, State Aeronautics Act, Section 21661.5, Section 21670 *et seq*., and Government Code Section 65302.3 et seq. (see Appendix B).



SOURCE: DeLorme Street Atlas USA, 2000; and ESA, 2007

Figure 1-1
Alameda County Airports

1.1.3 Alameda County Airport Land Use Commission

The seven-member Alameda County ALUC was created in 1971. After approving interim plans in the early 1970s, the ALUC adopted the ALUPP in 1977. The ALUPP was amended in 1979. The 1979 ALUPP was in use until a new ALUPP was adopted in 1986. This ALUCP replaces the ALUPP adopted by the ALUC in 1986.

Section 21675(a) of the California Public Utilities Code (PUC) states that the ALUC shall review land use compatibility plans as often as necessary in order to accomplish its purposes, but shall not be amend those plans more than once in any calendar year.

The ALUC is appointed as follows:

- Two commissioners representing the County, appointed by board of supervisors.
- Two commissioners representing cities in the County, appointed by a committee of all mayors, except that at least one representative must be appointed from among "any cities contiguous or adjacent to the qualifying airport" (i.e., an airport served by a scheduled airline or one operated for the benefit of the general public).
- Two commissioners with expertise in aviation, appointed by a committee of the managers of all public airports within the County.
- One commissioner representing the general public, appointed by the other six members of the commission.

Each member of the ALUC appoints a proxy to serve as a representative and to vote when the member is absent. Proxies serve at the pleasure of the appointing member of the ALUC. The proxy must be in writing and filed at the ALUC office. The term of office on the ALUC is four years. Any member can be removed at any time and without cause by the appointing body (California PUC Section 21671.5(a)).

In accordance with adopted bylaws, public meetings are held on the third Wednesday of each month.

1.1.4 Relationship of the ALUC to County and City Governments

The relationship between the Alameda County ALUC and County government, the City of Oakland, the City of San Leandro, the City of Hayward, the City of Alameda, and any future jurisdiction affected by this document is determined by the State Aeronautics Act. On one level, the ALUC does not need the approval of the County or any affected jurisdiction to adopt this ALUCP or to carry out its project review duties. However, despite its independent nature, the ALUC must still coordinate its activities with local land use jurisdictions on several matters:

- An ALUC must provide for a coordinated review in regards to the establishment of an airport influence area (AIA) boundary is considered mandatory, as state law requires that a "hearing and consultation with involved agencies" occurs (PUC Section 21675(c)).

- Once local agencies have revised their general or specific plans or overruled the ALUC, the proposed action of the local agency is not subject to further commission review, "unless the commission and the local agency agree that individual projects shall be reviewed by the commission" (Section 21676.5(b)).

- Once an ALUC has adopted a compatibility plan, the authority and responsibility for enforcing its compatibility policies lies fully with the affected jurisdictions.

1.2 Policy Framework

The policies set forth in Chapters 2 and 3 of this document are based upon four primary sources: state laws and guidelines; the *Oakland International Airport Master Plan*; OAK's airport layout plan (ALP); and the policies of affected local agencies with regard to land use, which can be found in general and specific plans as well as zoning ordinances.

1.2.1 State Laws and Guidelines

Most of the revisions that have been made to the state laws governing ALUCs over the last thirty years involve the procedures by which ALUCs operate. The most significant among the amendments to the state law (adopted in 1982) was the requirement for local general and specific plans to be made consistent with the ALUCP. This amendment also limited the authority of the ALUC to review individual development proposals and reduced the vote requirement for a local jurisdiction to override an ALUC decision from four fifths to two thirds.

While many of the procedures that govern how ALUCs operate are defined by state law, with respect to the creation of airport land use compatibility criteria, very little is written in the statutes. Instead, a portion of the law enacted in 1994 makes reference to another guiding document, the *California Airport Land Use Planning Handbook*, published by the California Division of Aeronautics. While the *Handbook* does not constitute official state policy, the statutes say that when preparing compatibility plans for airports, ALUCs shall "be guided by" this resource. The policies and maps in this plan reflect the guidance provided by the current edition of the *California Airport Land Use Planning Handbook*, dated January 2002[2].

[2] The January 2002 edition of the Handbook can be downloaded from the Division of Aeronautics website at www.dot.ca.gov/hq/planning/aeronaut.

1.2.2 Relationship to Airport Master Plan

ALUCPs are distinct from airport master plans in function and content: Airport master plans address on-airport uses and facilities, whereas ALUCPs address the compatibility of off-airport land uses. An airport master plan, which is prepared for and adopted by the entity that owns and operates the airport, assesses the demand for airport facilities and guides the development necessary to meet those demands. An ALUCP, which is prepared and adopted by an ALUC, is intended to ensure that incompatible development does not occur on land surrounding the airport as identified by the AIA.

Section 21675(a) of the California Public Utilities Code requires that an ALUCP be based on the applicable airport master plan(s). The master plan for OAK was adopted by the Board of Port Commissioners in 2006.

The ALUCP should be consistent with airport goals, insofar as these goals conform to regional planning policies, and take into account environmental impacts. State law provides that, before modification of an airport master plan, the public agency owning the airport must submit the proposed change to the ALUC for a finding of consistency with the ALUCP. The ALUC will follow the same procedures used for review of city or County actions. The public agency may override the ALUC with a two-thirds vote of its governing body, if it makes specific findings that the proposed action is consistent with the purposes of the state ALUC law.

1.3 Plan Implementation

1.3.1 General Plan Consistency

State law requires local general plans and applicable specific plans to be consistent with the ALUCP. In the event that the ALUCP is amended, the law requires the local public agency to amend its general or specific plan within 180 days to be consistent with the revised ALUCP (Government Code, Section 65302.3). In the event that the local public agency does not concur with a provision of the ALUCP, the public agency may override the ALUC by a two-thirds vote after first holding a public hearing and making findings that the general plan of the local jurisdiction is consistent with the intent of state law.

To be consistent with an ALUCP, a general plan must specifically address compatibility planning issues and must avoid direct conflicts with compatibility planning criteria. Consistency implies that "the concepts, standards, physical characteristics, and resulting consequences of a proposed action must not conflict with the intent of the law of the compatibility plan to which the comparison is being made" (Caltrans, 2002). The *Handbook* identifies the following methods for compatibility planning issues to be reflected in a general plan:

- Incorporate Policies into Existing General Plan Elements. This method requires the incorporation of all airport land use compatibility measures into appropriate general plan elements. For example, noise compatibility measures may be incorporated into the city's

or county's general plan noise element. With this approach, direct conflicts between the ALUCP and general plan are eliminated and compliance mechanisms are fully incorporated into the local jurisdiction's general plan.

- Adopt a General Plan Airport Element. This format may be appropriate when a city's or county's general plan also needs to address on-airport development or operational issues. Modification of other general plan elements may still be necessary to eliminate conflicts and provide cross-referencing.

- Adopt the ALUCP as a Stand-Alone Document. A city or county can adopt the ALUCP, and changes to the city's or county's general plan would be minimal. Policy reference to the separate ALUCP would need to be added to the general plan, and any direct land use or other conflicts with compatibility planning criteria would have to be removed. The compatibility policies would substantially appear only in the stand-alone compatibility plan.

- Implement Compatibility Policies through Zoning. Adoption of an airport combining district or overlay zoning ordinance by a local government is a way of codifying airport compatibility criteria described only conceptually in the ALUCP. A combining district can supplement local land use designations by adding specific noise and/or safety criteria applicable to future development in the airport influence area. Policy reference to airport compatibility in the general plan could be as simple as stating support of the ALUCP and that policy implementation is by means of the combining zone.

1.3.2 Project Referrals

Counties and cities are obligated by state law to submit land use actions and other actions such as zoning ordinances and building regulations for the ALUC's review. In addition to the types of land use actions for which referral to the ALUC is mandatory in accordance with state law, the ALUCP specifies other land use projects that either must or should be submitted for review. These major land use actions are defined in Section 2.6.3 of this ALUCP.

1.4 Plan Contents

The ALUC is concerned with airport activities that may adversely affect nearby land uses within the AIA. The most significant airport-related concerns are:

- Exposure of persons on the ground to accident potential;

- Prevention of obstructions to air navigation (tall objects; objects in safety zones); and

- Prevention of hazards to flight such as wildlife hazards, smoke, flare, lighting, electrical interference, magnetic and radio interference, and thermal plumes.

For each concern, the ALUC has adopted land use compatibility policies in Chapters 2 and 3 of the ALUCP; these policies address existing and future conditions at OAK and its environs.

This ALUCP is organized as follows:

Chapter 2: Chapter 2 of this ALUCP presents the airport compatibility and review policies that are applicable throughout Alameda County.

Chapter 3: Chapter 3 of this ALUCP Update presents compatibility and review policies and maps specific to Oakland International Airport.

Chapter 4: Chapter 4 of this ALUCP Update provides background data for Oakland International Airport and its environs.

Chapter 5: Chapter 5 provides references for the data presented in this ALUCP.

Appendix A – H: present supplemental data and source documents that were used to develop the ALUCP.

CHAPTER 2
County-wide Policies

2.1 Introduction

The policies set forth in Chapters 2 and 3 of the *Oakland International Airport Land Use Compatibility Plan* serve two functions:

1. To articulate the procedures to be used by the Alameda County Airport Land Use Commission (ALUC) and affected local agencies for the purpose of performing airport land use compatibility review as required in the California State Aeronautics Act (Public Utilities Code Section 21670 *et seq*.).

2. To identify the compatibility criteria that the ALUC shall use in the review of projects involving land use development within the Oakland International Airport (OAK) airport influence area (AIA), including Airport master plans and other development plans for OAK. Similarly, local agencies and any future jurisdictions that may be affected by this document shall use this airport land use compatibility plan (ALUCP) to modify their respective general or specific plans and zoning ordinances for consistency with this ALUCP.

While the policies presented in this chapter specifically address ALUC review procedures and county-wide compatibility considerations, compatibility criteria and other policies specifically designed for OAK are presented in Chapter 3.

2.2 ALUCP Lifecycle

According to State law, the ALUCP should be based on a long-range plan that reflects the anticipated growth of the airport for at least 20 years. This timeframe is a general guideline, as the ALUCP contains various components of differing life spans. Among the components hardest to estimate are future noise levels near an airport because of uncertainties associated with the level of operations and changes in fleet mix, etc. Therefore, periodic adjustment of the ALUCP can be expected in order to reflect changes in anticipated airport impacts, revisions in state and federal law and regulations, and new experience gained concerning the suitability of guidelines set by the ALUC.

2.3 Effective Date

The policies presented in this ALUCP shall become effective for OAK on the date that the Alameda County ALUC adopts the plan. Until that time, the policies set forth in the 1986 *Alameda County Airport Land Use Policy Plan (ALUPP)* shall remain in effect. Should this ALUCP be invalidated in its entirety by a court action, the 1986 ALUPP shall become effective. Additionally, any action to invalidate the compatibility plan associated with another public-use airport in the County shall not invalidate this ALUCP.

2.4 Definitions

Definitions of terms for the purposes of the policies set forth in this document are as follows (Caltrans, 2002). Additional definitions are found in the *Glossary*.

Aeronautics Act: Sections 21670 *et seq*. of the California Public Utilities Code.

Airport: An area of land or water that is used or intended to be used for the landing and taking off of aircraft, including its buildings and facilities.

Airport Influence Area (AIA): The area in which current or future airport-related noise, overflight, safety, and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses. In most circumstances, the airport influence area is designated by the ALUC as its *planning area boundary* for the airport and the two terms can be considered synonymous.

Airport Land Use Commission (ALUC): A commission authorized under the provisions of the California Public Utilities Code, Sections 21670 *et seq*. and established (in any county within which a public-use airport is located) for the purpose of promoting compatibility between airports and the land uses surrounding them.

Airport Land Use Compatibility Plan (ALUCP): As used herein, a plan, usually adopted by an ALUC, which sets forth policies for promoting compatibility between airports and the land uses which surround them. This document is sometimes referred to as an *Airport Land Use Policy Plan (ALUPP)*.

Aviation-Related Use: Any facility or activity directly associated with the air transportation of persons or cargo or the operation, storage, or maintenance of aircraft at an airport or heliport. Such uses specifically include runways, taxiways, and their associated protected areas defined by the Federal Aviation Administration (FAA), together with aircraft aprons, hangars, fixed base operations facilities, terminal buildings, etc.

Avigation Easement: A type of easement that typically conveys the following rights:

a) A right-of-way for free and unobstructed passage of aircraft through the airspace over the property at any altitude above a surface specified in the easement (usually set in accordance with the FAR Part 77 criteria).

b) A right to subject the property to noise, vibrations, fumes, dust, and fuel particle emissions associated with normal airport activity.

c) A right to prohibit the erection or growth of any structure, tree, or other object that would enter the acquired airspace.

d) A right-of-entry onto the property, with proper advance notice, for the purpose of removing, marking, or lighting any structure or other object that enters the acquired airspace.

e) A right to prohibit electrical interference, glare, misleading lights, visual impairments, wildlife hazards, or other hazards to aircraft flight from being created on the property.

Community Noise Equivalent Level (CNEL): The noise metric adopted by the State of California for evaluating airport noise. It represents the average noise level during a 24-hour day, adjusted to an equivalent level to account for the lower tolerance of people to noise during evening and nighttime periods relative to the daytime period.

Compatibility Zone: Any of the airport influence area zones set forth in this ALUCP for the purposes of determining land use compatibility.

Existing Land Use: A land use that either physically exists or else for which government approvals have been obtained through one or more of the following:

a) A valid building permit has been issued;

b) A development agreement that has been approved and vests site-specific land uses, plans, and intensities;

c) A tentative parcel or subdivision map has been approved and the original period, excluding extensions, within which the approval is valid and has not expired;

d) A vesting tentative parcel or subdivision map has been approved;

e) A final subdivision map has been recorded; or

f) A use permit or other discretionary entitlement has been approved and not yet expired.

Federal Aviation Regulations (FAR) Part 77: The part of the Federal Aviation Regulations that addresses objects affecting navigable airspace.

Height Review Overlay Zone: The area around an airport where the ground lies above a FAR Part 77 plane or less than 35 feet beneath a FAR Part 77 plane.

Helipad: A small, designated area, usually with a prepared surface, on a heliport, airport, landing / takeoff area, apron / ramp, or movement area used for takeoff, landing, or parking of helicopters.

Heliport: A facility used for operating, basing, housing, and maintaining helicopters.

Infill: Development that takes place on vacant property largely surrounded by existing development, especially development that is similar in character.

Local Jurisdiction: Alameda County or any city or other government agency (excluding state and federal agencies) having jurisdiction over land uses within its boundaries.

Nonconforming Use: An existing land use that does not conform to subsequently adopted or amended zoning or other land use development standards.

Project (Land Use Action, Development Proposal): Any proposed action under consideration by a local public agency or airport operator that is subject to ALUC review. Under State Law, such actions include amendment of a general or specific plan or adoption of a zoning ordinance or building regulation by a local public agency that affects land use within an AIA. It includes plans for proposed new airports or heliports and modification of an airport master plan by the airport owner. As specified by State Law, under certain circumstances a project may include other proposed local agency actions, regulations, or permits.

2.5 Geographic Scope

2.5.1 Airport Influence Area

The airport influence area (AIA), also known as the airport referral area, is the area in which current or future airport-related noise, overflight, safety, and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses, as well as lands on which the uses could negatively affect the airport(s) in question.

The specific limits of the AIA of Oakland International Airport are presented in Chapter 3. For a discussion of noise, height, and safety impacts and how those issues affect the areas in which this ALUCP applies, see Appendix B, “Airport Land Use Compatibility Concepts”.

2.5.2 County-wide Impacts on Flight Safety

Other lands, regardless of their location in the County, on which certain land use characteristics could adversely affect the safety of flight in the County, are included in this ALUCP. Specifically, any proposal for construction of any structure (including antennas) in the County that rises 200 feet above the ground level at the site is included in this ALUCP.

2.5.3 New Airports

The site and environs of any new airport that may be proposed anywhere in the County, including incorporated cities, and which requires an Airport Permit from the California Department of Transportation (Caltrans) Aeronautics Division are included in this ALUCP.

2.5.4 Heliports and Helipads

This ALUCP applies to any site and environs of any existing or proposed public-use, private-use, or special-use heliport or helipad (as defined by Caltrans) in the County, including incorporated cities that are included in this ALUCP (see Table 2-1 for list of existing heliports).

TABLE 2-1
HELIPORTS IN ALAMEDA COUNTY

Heliport Name	Location	Public/Private	Number of daily operations	Number of Night Operations (10:00PM to 7:00 AM)	Years of Operation	Miscellaneous
Alameda County, Alco Park	1221 Oak St. Oakland, CA 94607	Private	N/A	N/A	42	Last Inspected July 5, 1990
ACFD, Station 14	11345 Sunol Blvd. Sunol, CA 94586	Public	N/A	N/A	N/A	N/A
Camp Park Military Reservation	Dublin, CA	Public	N/A	N/A	N/A	N/A
Children's Hospital, Oakland	747 52nd St. Oakland, CA 94609	Private	Variable*	Variable*	8	Last Inspected December 17, 2003
Eden Medical Center	20103 Lake Chabot Rd. Castro Valley, CA 94546	Private	Variable*	Variable*	11	Last Inspected September 9, 2004
Fairview Site	27218 Fairview Ave., Fairview, CA 94542	Private	N/A	N/A	N/A	N/A
First Interstate Bank OPS	3440 Walnut Ave. Fremont, CA 94538	Private	N/A	N/A	24	Last Inspected May 25, 1990
Hacienda Business Park	4309 Hacienda Dr. Pleasanton, CA 94566	Private	N/A	N/A	21	Last Inspected January 31, 1990
Little Valley Site	Sunol, CA	Private	N/A	N/A	N/A	N/A
Ruby Hills Site	Pleasanton, CA	Private	N/A	N/A	N/A	No longer in use
Saint Rose Hospital	27200 Calaroga Ave. Hayward, CA 94545	Private	Variable*	Variable*	38	Last Inspected May 9, 2001
Valleycare Medical Center	5555 W. Las Positas Blvd. Pleasanton, CA 94588	Private	Variable*	Variable*	18	Last Inspected June 6, 2003
Washington Hospital	Corner of Bart Way and Civic Center Dr.	Private	Variable*	Variable*	N/A	N/A

* Variable - Heliport use at hospital locations based upon need.
N/A = Not available

Source: Alameda County, 2007.

FAA Advisory Circular (AC) 150/5390-2B, "Heliport Design," provides recommendations for heliport design and describes the federal requirements associated with heliport development. Alameda County encourages those with heliport proposals to implement the guidance set forth in the AC to the greatest extent practicable. The complete AC is available online in several files that can be downloaded upon request from the FAA website at: www.faa.gov. For more information pertaining to this FAA guidance, please refer to Appendix G, "Heliport Design." For heliport permitting requirements, contact Caltrans' Division of Aeronautics. Also see Section 2.7.4 for ALUC review criteria for new heliports, or heliport master/development plans.

2.6 Scope of ALUC Review

As specified by the State Aeronautics Act and described in the *Handbook*, review of local actions pertaining to airport land use compatibility is one of the fundamental reasons for the formation of ALUCs. Plans that undergo mandatory review by ALUCs prior to their adoption include general and specific plans and ordinances prepared by local jurisdictions (see Sections 2.6.1 and 2.6.2), as well as airport and heliport plans, including master plans, expansion plans, and plans for the construction of new facilities. Other types of actions proposed within the AIA that have the potential to affect land use or airport operations should also be reviewed by the ALUC for a determination of consistency with this ALUCP (see Section 2.6.2.).

2.6.1 Actions Requiring ALUC Review

2.6.1.1 Land Use Plans and Zoning Ordinances

As noted in the *Handbook,* The following plans or ordinances shall be reviewed by the ALUC for determination of consistency with the ALUCP prior to their approval by the local jurisdiction:

a) The adoption or approval of any amendment to a general or specific plan affecting property within an AIA (California Public Utilities Code Section 21676(b)).

    1) Until such time as the ALUC finds that a local jurisdiction's general plan or specific plan is consistent with the ALUCP, or the local jurisdiction has overruled the ALUC's determination of inconsistency by a two-thirds vote of its governing body, the local jurisdiction shall refer all actions, regulations, and permits involving land within an AIA to the ALUC for review (California Public Utilities Code 21676.5(a)). Only those actions that the ALUC elects not to review are exempt from this requirement.

    2) After a local jurisdiction has revised its general plan or specific plan for consistency with the ALUCP or has overruled the ALUC by a two-thirds vote of its governing body, the ALUC no longer has authority under state law to require that all actions, regulations, and permits be referred for review. However, the ALUC and the local agency can agree that the ALUC should continue to review individual projects in an advisory capacity.

i. The ALUC requests local jurisdictions to continue to submit major land use actions as listed in Section 2.6.2.

ii. Review of these actions is requested only if a review has not previously been conducted as part of a general plan, specific plan, or zoning ordinance action or if sufficient project-level detail to enable a full assessment of compatibility was not available at the time of a previous review.

iii. Because the ALUC is acting in an advisory capacity when reviewing projects under these circumstances, local jurisdictions are not required to adhere to the override process if they elect to approve a project without incorporating design changes or conditions suggested by the ALUC.

b) The adoption or approval of a zoning ordinance or building regulation which (1) affects property within an AIA, and (2) involves any of the airport-related concerns listed in Section 1.4 of this ALUCP (California Public Utilities Code Section 21676(b)). Any proposed change or variance to any such ordinance or regulation also must be submitted for ALUC review if issues of noise, safety, airspace protection, and overflight are involved.

c) Proposed redevelopment of a property within an AIA for which the existing use is consistent with the local general plan and/or specific plan, but does not conform to the compatibility criteria set forth in this ALUCP.

d) Proposed land use actions covered by Sections 2.6.1(a), 2.6.1(b), and 2.6.1(c) shall initially be reviewed by the ALUC Administrative Officer or her or his designee. If the ALUC Administrative Officer determines that significant compatibility issues are evident, the proposal shall be forwarded to the ALUC for review and decision. The ALUC authorizes the ALUC Administrative Officer to approve proposed actions having no apparent compatibility issues.

2.6.1.2 Airport and Heliport Plans

The following types of actions shall be referred to the ALUC for determination of consistency with the ALUCP prior to their approval by the local jurisdiction:

a) The adoption or modification of the master plan for an existing public-use airport (California Public Utilities Code Section 21676(c)).

b) Any proposal for expansion of an existing airport or heliport not included in that airport or heliports approved master plan if such expansion will require an amended airport permit from the state of California (California Public Utilities Code 21664.5).

c) Any proposal for a new airport, heliport, or helipad whether, for public use or private use (California Public Utilities Code Section 21661.5), if the facility requires a State Airport Permit.

2.6.2 Land Use Actions Recommended for ALUC Review

Although the ALUC does not have the authority under state law to require that all actions, regulations, and permits be referred for review, the ALUC requests that certain types of actions be referred to the ALUC for determination of consistency with the ALUCP prior to their approval by the local jurisdiction.

For example, the scope or character of certain proposed major land use actions, as listed below, is such that their compatibility with airport activity may be cause for concern. Even though these actions may be generally consistent with the local general plan or specific plan, sufficient detail may not be known to enable a full airport compatibility evaluation at the time that the general plan or specific plan is reviewed. To enable better assessment of compliance with the compatibility criteria set forth herein, ALUC review of these actions may be warranted.

a) Any proposed expansion of the sphere of influence or boundary of a city or special district that would extend into the AIA.

b) Proposed pre-zoning of property within the AIA associated with future annexation of land to a city.

c) Proposed residential development within the AIA, including land divisions, consisting of five or more dwelling units or parcels.

d) Any discretionary development proposal within the AIA for projects having a building floor area of 20,000 square feet or greater.

e) Proposed land acquisition within the AIA by a government or private entity for any facility that would act as an indoor or outdoor assembly area for a large number of people (i.e., meeting halls, parks, correctional institutions, sport facilities, etc.).

f) Any obstruction reviewed by the FAA in accordance with FAR Part 77 that receives a finding other than “not a hazard to air navigation.”

g) Any industrial use within the AIA having the potential to interfere with, or create hazards to aircraft in flight including, but not limited to:

    1) Electrical or other interference with radio communications or navigational signals;
    2) Lighting which could be mistaken for airport lighting;
    3) Thermal plumes;
    4) Glare in the eyes of pilots or aircraft using the airport; or
    5) Impaired visibility near the airport from smoke or steam.

h) Other nonresidential development including, but not limited to:

    1) Institutional uses (schools, prisons);

2) Utility uses (utility poles, electrical substations, water supply and treatment facilities, and power plants);

3) Healthcare uses (hospitals, respite facilities); and

4) Open spaces (parks, golf courses, agricultural areas, wildlife refuges, or other forms of land use that could serve as habitat for potentially hazardous wildlife).

i) Projects within the AIA with the potential to attract an increased number of birds to the vicinity of an airport, such as those with large water features, ponds, etc.

j) Proposed non-aviation development of airport property if such development has not previously been included in an airport master plan or community general plan reviewed by the ALUC. (See Section 2.4 for definition of aviation-related use.)

k) Regardless of location within Alameda County, any proposal for construction or alteration of a structure (including antennas) taller than 200 feet above the ground level at the site. (Such structures also require notification to the Federal Aviation Administration in accordance with Federal Aviation Regulations, Part 77, Paragraph 77.13(a)(1).)

l) Any other proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities.

2.7 Review Process

2.7.1 General

Proposed actions listed in Section 2.6.2 should be referred to the ALUC as early as possible so that the ALUC's review can be duly considered by the local jurisdiction prior to formalizing its actions. Though the timing may vary, all projects must be submitted to the ALUC for review prior to final approval by the local jurisdiction.

2.7.2 Public Noticing

Where applicable, the ALUC shall provide public notice and obtain public input in accordance with the California Public Utilities Code (PUC Section 21675.2(d)) and general plan law (Government Code, Section 65090) before action on any plan, regulation, or other land use proposal under consideration.

2.7.3 Review Process for Land Use Plans and Zoning Ordinances

2.7.3.1 Initial Review of General Plan Consistency

In conjunction with adoption of this ALUCP, the ALUC shall review the general plans, specific plans, and zoning ordinances of affected local jurisdictions to determine their consistency with the ALUCP.

a) Within 180 days of the ALUC's adoption or amendment of the ALUCP, each local jurisdiction must amend its general plan and any applicable specific plan to be consistent with the ALUCP or, alternatively, adopt findings and override the ALUC in accordance with Section 21676(b) of the Public Utilities Code (Government Code Section 65302.2).

b) Prior to taking action on a proposed amendment to a general plan or specific plan, the local jurisdiction must submit a draft of the proposal to the ALUC for review and approval in accordance with Section 21676(b) of the Public Utilities Code.

c) In conjunction with its submittal of a general plan or specific plan amendment to the ALUC, a local jurisdiction may request that the ALUC modify the areas defined as "infill" in accordance with Section 2.7.6.7 (a). The ALUC will include a determination on the infill as part of its action on the consistency of the general plan and specific plans.

d) After a local jurisdiction has revised its general plan or specific plan for consistency with the ALUCP, subsequent land use proposals within the AIA (which are consistent with the applicable general plan, specific plans, and zoning ordinances) are subject to ALUC review only under the conditions indicated in Sections 2.6.1 and 2.6.2.

2.7.3.2 ALUC Action Alternatives

When reviewing a general plan, specific plan, zoning ordinance, or building regulation for consistency with the ALUCP, the ALUC has three choices of action:

a) Find the plan, ordinance, or regulation consistent with the ALUCP. To make such a finding with regard to a general plan, the conditions identified in Section 2.7.5.2 must be met.

b) Find the plan, ordinance, or regulation consistent with the ALUCP, subject to conditions and/or modifications that the ALUC may require.

c) Find the plan, ordinance, or regulation inconsistent with the ALUCP. In making a finding of inconsistency, the ALUC shall note the specific conflicts upon which its determination is based.

2.7.3.3 Response Time

The ALUC must respond to a local jurisdiction's request for a consistency determination on a general plan, specific plan, zoning ordinance, or building regulation within 60 days from the date of referral (California Public Utilities Code Section 21676(d)).

a) If the ALUC fails to make a determination within that period within that period, the proposed action shall be deemed consistent with the ALUCP.

b) Regardless of ALUC action or failure to act, the proposed action must comply with other applicable local, state, and federal regulations and laws.

c) The referring agency shall be notified of the ALUC's action in writing.

2.7.3.4 Review Criteria

In order for a general or specific plan, or a zoning ordinance to be considered consistent with the ALUCP, both of the following must be accomplished:

a) No direct conflicts can exist between the two plans. Direct conflicts primarily involve general plan land use designations which do not meet the density or intensity criteria specified in the ALUCP although conflicts with regard to other policies also may exist. Note, however, that a general plan cannot be found inconsistent with the ALUCP because of land use designations that reflect existing land uses even if those designations conflict with the ALUC's compatibility criteria. Because ALUCs have no authority over existing land uses, general plan land use designations that merely reflect the existing uses for such parcels are, in effect, excluded from requirements for general plan consistency with the ALUC plan. This exception is applicable only if the general plan includes policies setting limitations on expansion and reconstruction of nonconforming uses consistent with Section 2.7.5.7.

b) Provisions must be made for evaluation of proposed land use development situated within an AIA relative to the compatibility criteria set forth in the ALUCP.

    1) Even if the land use designations in a general plan have been deemed consistent with the ALUCP, evaluation of the proposed development relative to the land use designations alone is usually insufficient. General plans typically do not contain the detailed airport land use compatibility criteria necessary for a complete compatibility evaluation of proposed development.

    2) Local jurisdictions have the following choices, or a combination thereof, for satisfying this evaluation requirement:

        i. The general plan and/or referenced implementing ordinances and regulations must contain sufficient detail to enable the local jurisdiction to assess whether a proposed development fully meets the compatibility criteria specified in the ALUCP (this requires both that the compatibility criteria be identified and that project review procedures be described);

ii. The ALUCP must be adopted by reference (additionally, the project review procedure must be described in a separate instrument presented to and approved by the ALUC); and/or

iii. The general plan must indicate that all major land use actions, as listed in Section 2.6.2 or otherwise agreed to by the ALUC, shall be referred to the ALUC for review in accordance with the policies of Section 2.7.5.

3) The status of ALUC review of major land use actions depends upon which of the preceding options the local jurisdiction selects for making its general plan consistent with the ALUCP. This status, in turn, affects whether a local jurisdiction would be required to use the override process in the event of a disagreement with the ALUC's action.

If either of the first two options listed in Section 2.7.3.4(b)(2) is selected, then referral of major land use actions to the ALUC is voluntary. In this case, the ALUC's review is advisory and the local jurisdiction would not need to use the override process if it elects to approve a project without incorporating the ALUC's comments.

If the third option listed in Section 2.7.3.4(b)(2) is selected, submittal of major land use actions for ALUC review is mandatory and override procedures would apply.

2.7.4 Review Process for Airport and Heliport Actions

2.7.4.1 Project Submittal Information

Any proposal for a new airport, heliport, helipad, or an airport or heliport master or development plan, submitted to the ALUC for review shall contain sufficient information to enable the ALUC to adequately assess the noise, overflight, safety, and airspace protection impacts of airport activity upon surrounding land uses.

a) At a minimum, information to be submitted shall include:

1) A layout plan drawing of the facility showing the location of:

i. Property boundaries;

ii. Runways or helicopter takeoff and landing areas;

iii. Runway or helipad protection zones; and

iv. Aircraft or helicopter approach/departure flight routes.

2) Airspace surfaces in accordance with FAR, Part 77.

3) Activity forecasts, including the number of operations by each type of aircraft proposed to use the airport, the percentage of day, evening, and night operations, and the distribution of takeoffs and landings for each runway direction.

4) Proposed flight track locations and projected noise contours or other relevant noise impact data.

5) A map showing existing and planned land uses in the areas affected by aircraft or helicopter activity associated with implementation of the proposed master plan or development plan.

6) Any environmental document (initial study, draft environmental impact report, etc.) that has been prepared for the project.

7) Identification and proposed mitigation of impacts on surrounding land uses.

b) Any applicable review fees as established by the ALUC shall accompany the application.

2.7.4.2 ALUC Action Alternatives for Reviews of New Airports and Heliports

When reviewing proposals for new airports or heliports, the ALUC's choices of action are:

a) Approve the proposal as being consistent with the specific review policies listed in Section 2.7.5.4.

b) Approve the proposal and adopt an ALUCP for that facility. State law requires adoption of such a plan if the airport or heliport will be a public-use facility (California Public Utilities Code Section 21675(a)).

c) Disapprove the proposal on the basis that the noise, safety, airspace protection, and overflight impacts it would have on surrounding land uses are not adequately mitigated.

2.7.4.3 ALUC Action Choices for Plans of Existing Airports or Heliports

When reviewing airport master plans or expansion plans for existing airports, the ALUC has three action choices:

a) Find the airport or heliport plan consistent with the ALUCP.

b) Find the airport or heliport plan inconsistent with the ALUCP.

c) Modify the ALUCP (after duly noticed public hearing) to reflect the assumptions and proposals in the airport or heliport plan.

2.7.4.4 Response Time

The ALUC must respond to a local jurisdiction's submittal of plans for a new airport or heliport, or an airport/heliport master or development plan, within 60 days from the date of referral (California Public Utilities Code Section 21676(d)).

a) If the ALUC fails to make a determination within that period, the proposed action shall be deemed consistent with the ALUCP.

b) Regardless of ALUC action or failure to act, the proposed action must comply with other applicable local, state, and federal regulations and laws.

c) The referring agency shall be notified of the ALUC's action in writing.

2.7.4.5 Review Criteria for New Airports or Heliports

In reviewing proposals for new airports and heliports, the ALUC shall focus on the potential noise, overflight, safety, and airspace protection impacts upon surrounding land uses. The review should examine the kinds of impacts that these factors would have upon both existing and planned land uses. Items to be considered should include:

a) Whether the existing or planned land uses would be considered incompatible with the airport or heliport if the latter were already in existence.

b) The measures provided in the development plan to mitigate the effects of noise, safety, height restriction, and overflight impacts on surrounding land uses, such as:

    1) Locating flight tracks so as to minimize the impacts;

    2) Other operational procedures to minimize impacts; and

    3) Acquisition or property interests (fee title or easements) on the impacted land.

c) The ALUC shall evaluate the adequacy of the proposed facility design (in terms of federal and state standards) only to the extent that the design affects surrounding land use. The ALUC does not have the authority to make a determination of conformance with federal and state standards.

d) The ALUC must base its review on the proposed airfield or heliport design. The ALUC does not have the authority to require alterations to the airfield or heliport design.

e) The review shall examine the relationships between existing and planned land uses in the vicinity of the proposed airport or heliport and the impacts that the proposed facility would have upon these land uses.

f) Other types of environmental impacts (e.g., air quality, water quality, natural habitats, vehicle traffic, etc.) are not within the scope of ALUC review.

2.7.4.6 Review Criteria for Airport Master, Layout, and Development Plans

When reviewing new or modified airport master or development plans for existing airports, the ALUC shall determine whether activity forecasts or proposed facility development identified in

the plan differ from the forecasts and development assumed for that airport in this ALUCP. Attention should specifically focus on:

a) Activity forecasts that:

    1) Are significantly higher than those in the ALUCP; or

    2) Include a higher proportion of larger or noisier aircraft.

b) Proposals to:

    1) Construct a new runway or helicopter takeoff and landing area;

    2) Permanently change the length, width, or landing threshold location of an existing runway; or

    3) Establish an instrument approach procedure.

2.7.4.7 Consistency Determination Criteria for Master or Development Plans

The ALUC shall determine whether the proposed master plan or development plan is consistent with the ALUCP. The ALUC shall base its determination of consistency on:

a) Findings that the forecasts and aviation-related development identified in the master or development plan would not result in greater noise, overflight, or safety impacts or height restrictions on surrounding land uses than are assumed in the ALUCP.

b) A determination that any non-aviation development proposed within the airport or heliport boundary will be consistent with the basic compatibility criteria set forth in Table 2-3.

2.7.5 Review Process for Proposed Land Use Actions

2.7.5.1 Information Required for Review of a Proposed Individual Project

Project sponsors must provide information for ALUC review. Items (a) through (f) below are summarized in Table 2-2.

a) Indication, in writing, that the proposed local action is referred to the ALUC for mandatory review and comment.

b) Site maps to indicate the location of the proposed local action.

c) The identities of all property owners within the land area encompassed by the proposed local action, and, if any development or development application has been proposed to the referring jurisdiction or is known by the referring jurisdiction to be in preparation in conjunction with the local action, the identities of the applicant or applicants and of the representative(s) thereof.

d) A full description and map of the geographic area. The map and description must indicate:

1) The geographic area encompassed by the proposed local action;

2) The assessor's parcel number of all properties involved by the proposed local action;

3) The relationship of the proposed local action to the Airport;

4) The relationship of the proposed local action to the safety zones as defined by the ALUCP in force; and

5) The relationship of the proposed local action to airport noise contours, as defined by the ALUCP.

TABLE 2-2
INFORMATION REQUIRED FOR ALUC REVIEW OF PROPOSED LAND USE ACTIONS

	Local Actions*				
Information Required	**General Plan**	**Specific Plan**	**Zoning Ordinance**	**Building Regulation**	**Individual Project**
Indication (in writing) that the proposed local action is referred to the ALUC for mandatory review under the provisions of the State of California Public Utilities Code	Y	Y	Y	Y	N
Indication (in writing) that the proposed local action is referred to the ALUC for optional review and comment	N	N	N	N	Y
Full text of the proposed referring agency action	Y	Y	Y	Y	N/A
Site map of the proposed local action	N/A	N/A	N/A	N/A	Y
Map and written description including:					
▪ Geographic Area	Y	Y	Y	N/A	Y
▪ All parcel nos. associated with the proposed project	Y	Y	Y	N/A	Y
▪ Relationship of proposed action to the airport, safety zones, and noise contours	Y	Y	Y	N/A	Y
▪ Elevation of the proposed project action	Y	Y	Y	N/A	Y
A description of land uses, densities, and open space conservation for the proposed action	Y	Y	Y	N/A	N/A
A copy of any CEQA or NEPA document, noise study, or other environmental evaluation prepared in conjunction with the proposed action.	Y	Y	Y	N/A	Y
A written assurance that a real estate disclosure document will be provided for property offered for sale or lease within the AIA.	Y	Y	Y	N/A	Y

Abbreviations:

Y - Yes, information is required; **N** - No, information is not required; **N/A** - Not applicable

* This also includes amendments to general and specific plans.

e) A description of uses, land use densities, residential land use densities, and open space conservation proposed for the local action.

f) An analysis of the maximum elevation of improvements (i.e., site elevation plus height of improvements) that would be permissible under the terms and conditions of the proposed local action, and of the relationship of the maximum allowable elevation of improvements to the applicable imaginary airport surfaces as defined in Part 77 of the Federal Aviation Regulations and the minimum instrument approach altitudes, as specified by the U.S. Standards for Terminal Instrument Procedures of any instrument approaches that entail overflight of the property affected.[1]

g) A copy of any Initial Study, Environmental Impact Report, Environmental Assessment, Environmental Impact Statement, noise study, or other environmental evaluation prepared or required in conjunction with the proposed local action.

h) A written assurance that for residential property within the AIA offered for sale or lease the notice of intention filed with the Department of Real Estate shall include the following (as per the provisions of Business and Professional Code Section 11010 and Civil Code Sections 1102.6, 1103.4, and 1353):

   NOTICE OF AIRPORT IN VICINITY: This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

Failure to provide the ALUC with required information for any proposed local action shall constitute sufficient grounds for a determination of inconsistency.

2.7.5.2 ALUC Administrative Officer's Choices

The ALUC Administrative Officer, when reviewing major land use actions, has two choices of action:

a) Find that the proposed project does not contain characteristics likely to result in inconsistencies with the compatibility criteria set forth in this ALUCP. The ALUC Administrative Officer is authorized to approve such projects on behalf of the ALUC.

b) Find that the proposed project may be inconsistent with the ALUCP. The ALUC Administrative Officer shall forward any such project to the ALUC for a consistency determination.

[1] The U.S. Standards for Terminal Instrument Procedures (TERPS) are contained in FAA Order 8260.3B CHG 19 (5/12/02).

2.7.5.3 ALUC Action Alternatives

The ALUC has three choices of action when reviewing a major land use project proposal:

a) Find the project consistent with the ALUCP.

b) Find the project consistent with the ALUCP, subject to compliance with such conditions as the ALUC may require. Any such conditions should be limited in scope and be described in a manner which allows compliance to be clearly assessed (e.g., the height of a structure).

c) Find the project inconsistent with the ALUCP. In making a finding of inconsistency, the ALUC shall note the specific conflicts upon which its determination is based.

2.7.5.4 Response Time

State law does not specify a timeframe for ALUCs to review land use actions other than amendment of a general plan or specific plan or the addition or approval of a zoning ordinance or building regulation. Nevertheless, the policy of the Alameda County ALUC is that:

a) Reviews of projects forwarded to the ALUC Administrative Officer for a consistency determination shall be completed within 21 days following the submittal of a complete application. Should the project require further review, the Administrative Officer will forward the project to the ALUC, and will schedule a hearing within 60 days of project referral.

b) The date of referral is deemed to be the date on which all applicable project submittal information as listed in Section 2.7.5.1 is received by the ALUC Administrative Officer.

c) If the ALUC Administrative Officer or the ALUC fails to make a determination within the above time periods, the proposed action shall be deemed consistent with the ALUCP.

d) Regardless of action or failure to act on the part of the ALUC Administrative Officer or the ALUC, the proposed action still must comply with other applicable local, state, and federal regulations and laws.

e) The referring agency shall be notified of the ALUC Administrative Officer's and/or the ALUC's action in writing.

2.7.5.5 Subsequent Review

Once a project has been found consistent with the ALUCP, it need not be referred for review at subsequent stages of the planning process (e.g., for a use permit after a zoning change has been reviewed) unless:

a) Insufficient information was available at the time of the ALUC's original review of the project to assess whether the proposal would be fully in compliance with compatibility

criteria (e.g., the site layout and structure height might not be known at the time a general plan change or zoning amendment is requested).

b) The design of the project subsequently changes in a manner that could raise questions as to the validity of a previous finding of compatibility. Changes warranting review include, but are not limited to, the following:

    1) An increase in the number of dwelling units proposed for the site;

    2) A proposed increase in intensity of use (more people on the site);

    3) Incorporation of clustering or modifications to the configuration of open land areas proposed for the site; and/or

    4) A proposed increase in the height of structures or other design features.

c) The local jurisdiction concludes that further review is warranted.

d) The ALUC requests further review at a date later in the approval process.

2.7.5.6 Basic Land Use Compatibility Criteria

The basic compatibility criteria table (see Table 2-3) represents a compilation of compatibility criteria associated with noise, overflight, safety, and airspace protection impacts.

The basic criteria for assessing whether a land use plan, ordinance, or development proposal is to be judged compatible with a nearby airport are set forth in this table. Additional factors pertaining to the review of general plans shall also be taken into account.

TABLE 2-3
BASIC COMPATIBILITY CRITERIA AND SUPPORTING INFORMATION

Safety Zone/FAR Part 77 Surface	Compatibility Qualities	Compatibility Factors / Runway Proximity
Runway Protection Zone / Approach Surface	• Prohibit all structures except those with aeronautical functions • Prohibit residential land uses • Prohibit objects exceeding Part 77 height limits • Prohibit storage of hazardous materials • Avigation easement dedication	• Very high risk • Runway Protection Zone is defined by FAA criteria • Exposure to high noise aircraft levels • Aircraft approaching/departing airport at low altitudes
Inner Approach/Departure Zones / Approach Surface	• Prohibit schools, day care centers, libraries, hospitals, nursing homes, and places of worship • Limit nonresidential development to low-intensity uses (see Notes for interior noise level requirements) • Prohibit above ground storage, hazardous materials or other hazards to flight/objects exceeding Part 77 height limits • Allow only low density (e.g., rural residential) residential development (if not deemed unacceptable because of noise—see Notes) • Avigation easement dedication	• Substantial Risk • RPZs together with inner safety zones encompass 30% - 50% of near-airport aircraft accident sites (air carrier and general aviation) • Encompasses areas overflown at low altitudes (typically 200-400 feet above runway elevation)
Inner Turning Zones / Transitional Surface	• Prohibit critical infrastructure facilities • Limit residential uses to very low densities (if not deemed unacceptable because of noise—see Notes) • Avoid non-residential uses having moderate or higher usage intensities (e.g., major shopping centers, fast food restaurants, theaters, meeting halls, buildings with more than three above ground floor are generally unacceptable) • Prohibit children's schools, day care centers, hospitals, nursing homes • Avoid uses that could create hazards to flight • Avigation easement dedication	• Zone primarily applicable to general aviation airports • Covers locations where aircraft are typically turning from the base to final approach legs of the standard traffic pattern and are descending from traffic pattern altitude • Zone also includes the area where departing aircraft normally complete the transition from takeoff power and flap settings to a climb mode and have begun to turn their en route heading
Outer Approach/Departure Zones / Approach Surface	• In undeveloped areas, limit residential uses to very low densities; if alternative uses are impractical, allow infill in urban areas (if not deemed unacceptable because of noise—see Notes) • Prohibit children's schools, large day care centers, hospitals, nursing homes • Limit non-residential uses as in Zone 3. • Prohibit other hazards to flight/objects exceeding Part 77 height limits	• Situated along extended runway centerline beyond Zone 2 • Approaching aircraft usually at less than traffic pattern altitude • Partially applicable for busy general aviation runways, runways with straight in instrument approach procedures, and other runways where straight-in or straight-out flight paths are common. • Zone can be reduced in size or eliminated for runways with very low activity levels.

TABLE 2-3
BASIC COMPATIBILITY CRITERIA AND SUPPORTING INFORMATION

Safety Zone/FAR Part 77 Surface	Compatibility Qualities	Compatibility Factors / Runway Proximity
	• Avigation easement dedication	
Sideline Zones / Transitional Surface	• Avoid residential uses • Allow all common aviation-related activities provided that height criteria is met (also see Notes for interior noise level requirements) • Limit other non-residential uses similarly to Zone 3, but with slightly higher usage intensities • Prohibit children's schools, large day care centers, hospitals, nursing homes	• Encompasses close-in area lateral to runways • Area not normally overflown; primary risk is with aircraft losing directional control on takeoff • Area is on airport property at most airports
Traffic Pattern Zone / Horizontal Surface	• Allow residential uses (if not deemed unacceptable because of noise—see Notes) • Allow non-residential uses; prohibit outdoor stadiums and similar uses with very high intensities • Avoid children's schools, large day care centers, hospitals, nursing homes	• Generally low likelihood of accident occurrence at most airports; risk concern primarily is with uses for which potential consequences are severe • Zone includes all other portions of regular traffic patters and pattern entry routes
Other Airport Environs / Horizontal Surface / Outer Conical Surface	• Prohibit hazards to flight • Allow residential uses	• All areas outside Zones 1 through 6, but within AIA boundaries
High Terrain	• Same as underlying safety zone	

NOTES:
See Chapter 3 for airport-specific criteria, which may change or provide additions to these policies.
Refer to FAR Part 77, *Objects Affecting Navigable Airspace*, for specific airspace review and height limit guidelines.
Per State standards (Title 21, §5012), residential uses are not compatible within the 65 CNEL contour or higher .
Noise-sensitive (e.g., schools, hospitals, libraries, etc.), non-residential uses within the 65 CNEL contour, or higher, must have a maximum interior noise level of 45 dB.
Buyer awareness notification required for the sale or lease of residential property within airport influence area, per Business Professional Code Section 11010 and Civil Code sections 1102.6, 1103.4, and 1353.
See Caltrans' *California Airport Land Use Planning Handbook* for additional guidance on safety and noise compatibility issues.

DEFINITIONS:
Allow: Use is acceptable.
Limit: Use is acceptable only if density/intensity restrictions are met.
Avoid: Use generally should not be permitted unless no feasible alternative is available.
Prohibit: Use should not be permitted under any circumstances.
Children's Schools: Through grade 12.
Large Day Care Centers: Commercial facilities as defined in accordance with state laws; for the purposes here, family day care homes and noncommercial facilities ancillary to a place of business are generally allowed.
Aboveground Bulk Storage of Fuel: Tank size greater than 6,000 gallons (this suggestion is based on the Uniform Fire Code criteria which are more stringent for larger tank sizes.

SOURCE:
Caltrans, *California Airport Land Use Planning Handbook,* January 2002, Table 9B.

REFERENCES:
The risk factors presented here are derived from the *California Airport Land Use Planning Handbook*, and are intended to demonstrate the need for the safety criteria provided in Chapters 2 and 3 of this ALUCP.
Height limits and the review of objects in airport airspace is determined under the guidelines of Federal Aviation Regulation (FAR) Part 77: *Objects Affecting Navigable Airspace*.
Hazards to flight would include tall objects, visual and electronic forms of interference, and land use development that would attract wildlife hazardous to aircraft operations.

For the purposes of reviewing proposed amendments to county or city land use plans and zoning ordinances, as well as in the review of most individual development proposals, the criteria in the summary table are anticipated to suffice. However, certain complex land use actions may require more intensive review. The ALUC may refer to the supporting criteria, as listed in Chapter 3, to clarify or supplement its review of such actions.

2.7.5.7 Special Conditions

a) Infill. Where development not in conformance with this ALUCP already exists, additional infill development of similar land uses may be allowed to occur even if such land uses are to be prohibited elsewhere in the AIA. The burden for demonstrating that a proposed development qualifies as infill rests with the project proponent and/or local jurisdiction

    1) A parcel can be considered for infill development if it meets all of the following criteria plus the applicable provisions of either Sections 2.7.5.7(a)(2) or 2.7.5.7(a)(3) below:

        i. The parcel size is 20 acres or less.

        ii. The site is at least 65% bound (disregarding roads) by existing uses that are similar to, or more intensive than, those proposed.

        iii. The proposed project would not extend the perimeter of the area defined by the surrounding, already developed, incompatible uses.

        iv. Further increases in the density, intensity, and/or other incompatible design or usage characteristics (e.g., through use permits, density transfers, addition of second units on the same parcel, height variances, subdivisions, or other strategy) are not included.

        v. The area to be developed cannot previously have been set aside as open land in accordance with open land policies presented in Chapter 3 of this ALUCP unless replacement open land is provided within the same compatibility zone.

    2) For residential development, the density of the parcel proposed for development shall not exceed the following:

        i. For parcels of 10 acres or less, the density shall not exceed the median density represented by all existing lots that lie fully or partially within a distance of 300 feet from the defined infill area.

        ii. If the size of the parcel is greater than 10 acres (but no larger than 20 acres), then the development density shall be no greater than double the density permitted in accordance with the basic compatibility criteria listed in Table 3-2.

3) For non-residential development:

   i. If the size of the parcel proposed for development is 10 acres or less, the usage intensity (the number of people per acre) of the proposed use shall be no greater than the average intensity of all existing uses that lie fully or partially within a distance of 300 feet from the boundary of the proposed development.

   ii. If the size of the parcel proposed for development is greater than 10 acres (but no larger than 20 acres), the proposed use shall not have an intensity (the number of people per acre) more than 50% above the intensity permitted in accordance with the basic compatibility criteria listed in Table 3-2.

4) In order for the ALUC to consider proposed development under these infill criteria, the local jurisdiction having land use authority (Alameda County or affected cities) must first identify the qualifying locations in its general plan or other adopted planning document that has been found consistent with the ALUCP by the ALUC. This action may take place in conjunction with the process of amending a general plan for consistency with the ALUC plan or may be submitted by the local jurisdiction
for consideration by the ALUC at the time of adoption of this ALUCP.

b) Nonconforming Uses. Uses that are not in conformance with this ALUCP may only be expanded as follows:

1) Nonconforming residential uses may be expanded in building size provided that the expansion does not result in more dwelling units than currently exist on the parcel.

2) A nonconforming nonresidential development may be continued, modified, transferred, or sold, provided that no such use shall be expanded in area or increased in intensity (the number of people per acre) above the levels existing at the time of adoption of this ALUCP.

3) Any proposed expansion of a nonconforming use (in terms of the number of dwelling units or people on the site) shall be subject to ALUC review. Factors to be considered in such reviews include whether the development qualifies as infill or warrants approval because of other special conditions.

c) Reconstruction. An existing nonconforming development that has been fully or partially destroyed as the result of a calamity may be rebuilt only under the following conditions:

1) Nonconforming residential uses may be rebuilt provided that the expansion does not result in more dwelling units than existed on the parcel at the time of the damage.

2) A nonconforming nonresidential development may be rebuilt, even if completely destroyed, provided that the reconstruction does not increase the floor area of the previous structure or result in an increased intensity of use (i.e., more people per acre).

3) Nothing in Sections 2.7.5.7(c)(1) through 2.7.5.7(c)(2) is intended to preclude work required for normal maintenance and repair.

d) Development by Right. Nothing in these policies prohibits construction or alteration of a single-family home on a legal lot of record if such use is permitted by local land use regulations. Construction of other types of uses also may proceed if local government approvals, based upon previous ALUC compatibility criteria and project review, effectively qualify the development as existing.

e) Parcels Lying within Two or More Compatibility Zones. If a parcel is split by safety zone boundaries, the intensity of development allowed within the more restricted portion of the parcel should be transferred to the less restricted portion. However, the ALUC can consider less restrictive options on a case-by-case basis if special conditions or design criteria are applied to the proposed project. These special conditions may include:

1) Maintaining adequate open space for emergency landings (0.5 acre of parcel);

2) Clustering of development; and

3) Risk reduction building design (i.e., concrete walls, limited number of windows, upgraded roof strength, no skylights, enhanced fire sprinkler system, single-story height, increased number of emergency exits, etc.).

f) Other Special Conditions. The compatibility criteria set forth in this plan are intended to be applicable to all locations within each AIA. However, it is recognized that there may be specific situations where a normally incompatible use can be considered compatible because of terrain, specific location, or other extraordinary factors or circumstances related to the site.

1) After due consideration of all the factors involved in such situations, the ALUC may find a normally incompatible use to be acceptable.

2) In reaching such a decision, the ALUC shall make specific findings as to why the exception is being made and that the land use will not create a safety hazard to people on the ground or aircraft in flight nor result in excessive noise exposure for the proposed use. Findings also shall be made as to the nature of the extraordinary circumstances that warrant the policy exception.

3) The burden for demonstrating that special conditions apply to a particular development proposal rests with the project proponent and/or the referring agency, not with the ALUC.

4) The granting of a special conditions exception shall be considered site specific and shall not be generalized to include other sites.

5) Special conditions that warrant general application in all or part of the AIA of one airport, but not at other airports, are set forth in Chapters 3 of this ALUCP.

This page left intentionally blank.

CHAPTER 3
Oakland International Airport Policies

3.1 Purpose and Scope

This Airport Land Use Compatibility Plan (ALUCP) for Oakland International Airport (OAK) presents the criteria, maps, and policies to be utilized by the Alameda County Airport Land Use Commission (ALUC) and other local jurisdictions. These policies shall apply when reviewing proposals for land use development within the airport influence area (AIA) for its compatibility with airport operations. The ALUC and affected cities within the AIA shall also use these policies when modifying general plans, zoning ordinances, and other local land use policies. The authority for such reviews is derived from the California State Aeronautics Act (Public Utilities Code, Section 21670 *et seq*.).

This ALUCP is based on the OAK's most recent Airport Layout Plan (ALP), which depicts both current (2005) and future (2025) aviation and non-aviation related facilities. While State law (PUC Section 21675 (a)) normally requires that data included in an ALUCP address the anticipated growth of an airport over a minimum of a 20-year period following publication, a state law provision allowing an ALUC's compatibility plan to be based upon an airport layout plan, with the approval of the Division of Aeronautics, was added in 1990. While the timeframe addressed by the OAK's 2006 Master Plan extends to 2025, projects in the Master Plan primarily focus on a "near-term" (2010 – 2012) timeframe. The long-range, "unconstrained", activity forecasts would require additional runway facilities which are not recommended in the Master Plan or the ALP.

This ALUCP is intended to be used in conjunction with the countywide policies and procedures adopted by the ALUC, which are presented in Chapters 1 and 2 of this document.

3.1.1 Airport Influence Area

The policies within this ALUCP apply to all lands within the airport influence area (AIA), also known as the airport referral area. The AIA is the area within which the ALUC is authorized to review new local land use actions, plans, and policies. Figure 3-1 shows the AIA for OAK. This particular AIA was defined based on political boundaries, noise contours and flight tracks. The northernmost boundary of OAK's AIA begins at High Street in the City of Alameda and extends eastward to San Leandro Street. The AIA follows San Leandro Street south until it reaches Lewelling Boulevard in the City of Hayward, where it turns west. The AIA continues to follow Lewelling Boulevard westward until it reaches the Union Pacific Railroad tracks and turns south.

The AIA boundary follows the tracks until it turns east on West Winton Avenue, and continues south on Hesperian Boulevard. The AIA turns west on HWY 92 to the San Francisco Bay. The AIA includes portions of the cities of Oakland, San Leandro, Alameda, Hayward, and small unincorporated areas of Alameda County in the vicinity of the Airport, including San Lorenzo, located southeast of the Airport.

It is also important to note that the southern portion of the AIA for OAK intersects with the Hayward Executive Airport's (HWD) AIA (see Figure 3-2). Should a question of jurisdictional authority arise within this zone of intersect between the AIAs, *the Airport Land Use Compatibility plan with the most stringent land use policies will apply*.

3.2 Compatibility Zones

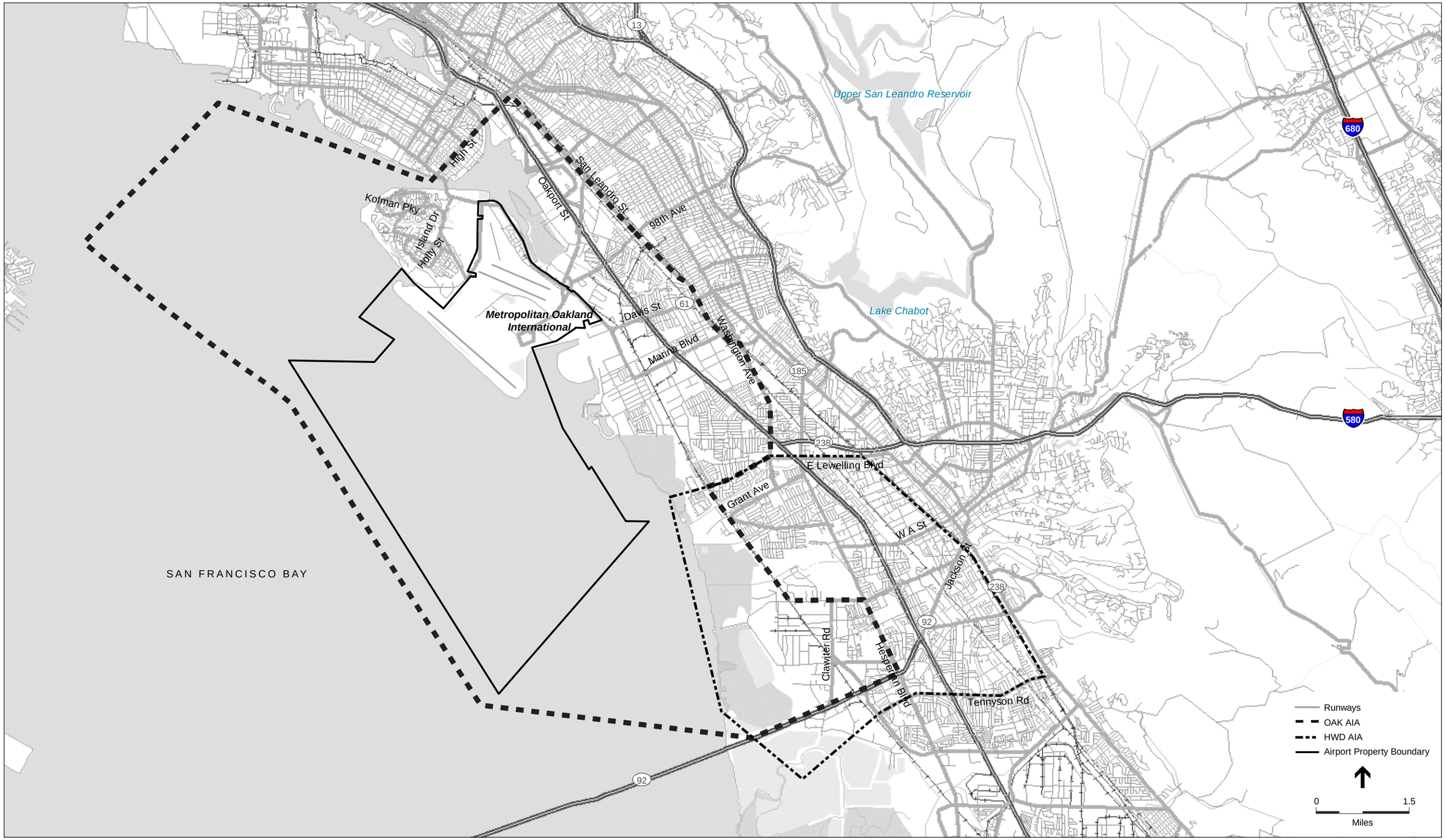
3.2.1 Noise Compatibility Zones

Figure 3-3 presents the projected (2010) noise contours associated with operations at OAK. As shown in the figure, the 60 and 65 Community Noise Equivalent Level (CNEL) contours associated with operations at OAK extend into the AIA for HWD. In most cases where the contours overlap, the noise exposure associated with the OAK contours exceeds the noise exposure that would be associated with the HWD contours. Therefore, when reviewing potential development projects or land use changes in areas where the OAK and HWD contours overlap, noise policies associated with the OAK ALUCP shall apply.

3.2.2 Safety Compatibility Zones

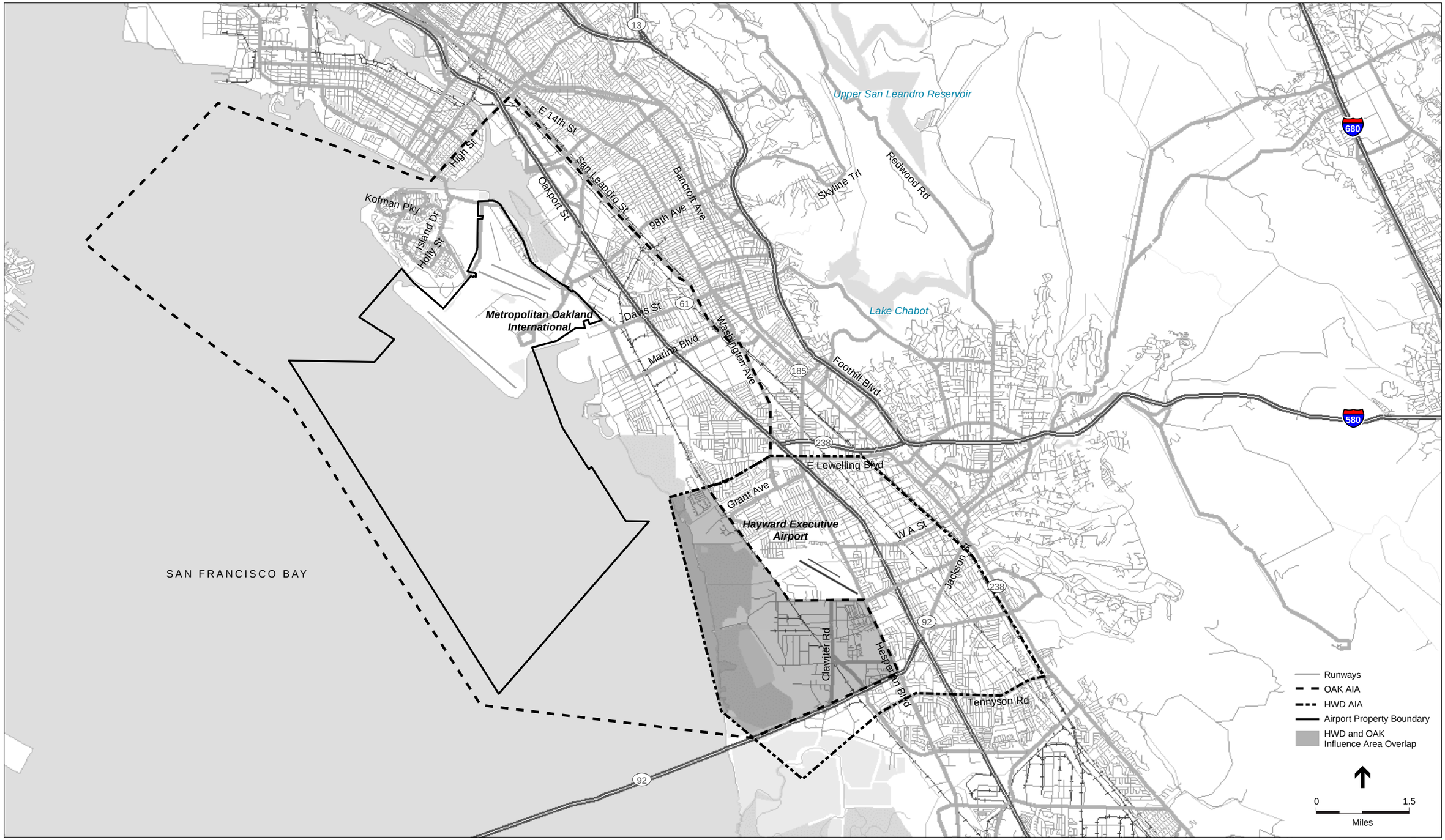
To depict the relative risks of aircraft accidents, the *California Airport Land Use Planning Handbook* (Caltrans, 2002) provides a set of safety zones, and the risk contours upon which they are based. The risk contours are derived from the accident location database described in the *Handbook* and show the relative concentrations of accidents near the ends of runways of different lengths. The safety zones are developed upon this data and are created for varying runway lengths and operational characteristics, while at the same time taking into account aeronautical factors that affect where aircraft accidents are most likely to occur. (For ease of application to land use compatibility planning, safety zones are depicted in regular geometric shapes, as opposed to the risk contours, and assume an equal distribution of arrivals and departures at each runway end.)

A total of seven different safety zones are shown in Figure 3-4. The choice of safety zone criteria appropriate for a particular zone is largely a function of risk acceptability. For example, some land uses represent unacceptable risks when located near aircraft operation areas and are prohibited (e.g., schools and hospitals). Where the risks associated with a particular land use are considered significant but tolerable, restrictions may be established to reduce the risk to an acceptable level. Acceptable land uses generally require no limitations (see Table 3-2 for a list of compatible land uses within each safety zone).



SOURCE: ESA Airports, ESRI, OAK Airport Master Plan

Figure 3-1
Airport Influence Area



SOURCE: ESA Airports, ESRI, OAK Airport Master Plan

Figure 3-2
HWD and OAK Influence Area Overlap

3.2.3 Airspace Protection Zones

The airspace protection zones established for the purpose of evaluating the airspace compatibility of land use development in the AIA of Oakland International Airport are depicted on Figure 3-5. The zones represent the imaginary surfaces defined for the Airport in accordance with Federal Aviation Regulation (FAR) Part 77, *Objects Affecting Navigable Airspace*.

3.2.4 Overflight Zones

The overflight zones established for the purpose of providing overflight notification for land uses in the AIA of OAK are depicted in Figure 3-6.

3.3 Compatibility Policies

3.3.1 Noise

3.3.1.1 Objective

Noise compatibility policies are established in order to prevent the development of noise-sensitive land uses in portions of the airport environ that are exposed to significant levels of aircraft noise.

3.3.1.2 Evaluation

The noise compatibility policies set forth in this section shall be used in conjunction with Figure 3-3 and Table 3-1 during the evaluation of proposed land uses within the AIA for OAK.

a) The criteria in this section indicate the maximum acceptable airport-related noise levels, which are measured in terms of CNEL, for a range of land uses.

b) Within the two noise exposure ranges, each land use type is shown as “compatible”, “conditional”, or “incompatible”. The meaning of these terms is provided in Table 3-1 and differ for indoor versus outdoor uses.

c) Land uses not specifically listed in Table 3-1 shall be evaluated using the criteria for similar listed uses.

3.3.1.3 Measurement

The magnitude of exposure experienced by land around OAK to airport-related noise shall be described in terms of CNEL.

a) The noise contours depict the greatest annualized noise impact, measured in terms of CNEL, anticipated to be generated by the airport over the planning timeframe, which in accordance with state law, extends at least 20 years into the future.

b) The noise contours depicted in Figure 3-3 were created for the current master plan for OAK and utilized by this ALUCP for the purpose of establishing the noise compatibility criteria herein. The ALUC should periodically review the projected CNEL contours and update them if and when appropriate.

c) The threshold for evaluation is the projected 60 dB CNEL contour. All proposed land use changes that would sustain a noise exposure at a level that is less than 60 CNEL is considered consistent with the noise compatibility policies.

3.3.1.4 Factors Determining Noise Criteria

The factors considered during the development of noise criteria include the following:

a) Established federal and state regulations and guidelines;

b) Established local noise-abatement policies, general and specific plan policies;

c) The degree to which noise would affect the activity associated with a particular land use, and ordinances; and

d) The extent of outdoor activity associated with a particular land use.

3.3.1.5 Appropriate Noise Levels for Specific Types of Land Use Development

a) The maximum CNEL considered acceptable for new residential uses in the vicinity of OAK is anything less than the 65 CNEL contour as shown on Figure 3-3.

b) The compatibility of new nonresidential development with noise levels generated by the Airport is provided in Table 3-1.

    1) Buildings associated with land uses listed as “conditional” must have added sound attenuation as necessary to meet the interior noise level standards indicated in Table 3-1 and in Policy 3.3.1.6.

    2) Land uses not specifically identified shall be evaluated using the criteria for listed land uses of a similar nature.

3.3.1.6 Interior Noise Levels

Land uses for which interior activities may be easily disrupted by noise shall be required to comply with the following interior noise level criteria:

a) The maximum, aircraft-related, interior noise level which shall be considered acceptable for land uses within the AIA is 45 dB CNEL in (calculations should assume windows are closed):

1) Living and sleeping areas of single- or multi-family residences;
2) Hotels and motels;
3) Hospitals and nursing homes;
4) Churches, meeting halls, office buildings, and mortuaries; and
5) Schools, libraries, and museums.

b) The maximum, aircraft-related, interior noise level which shall be considered acceptable for land uses within the AIA is 50 dB CNEL in (calculations should assume windows are closed):

1) Office environments;
2) Eating and drinking establishments; and
3) Other miscellaneous commercial facilities.

c) When reviewed as part of a general plan or zoning ordinance amendment or as a major land use action, evidence that proposed structures will be designed to comply with these criteria shall be submitted to the ALUC under the following circumstances: Any hotel or motel, church, meeting hall, office building, mortuary, museum, or other noise-sensitive non-residential use within OAK's 65-dB CNEL contour.

3.3.1.7 Engine Run-Up and Testing Noise

ALUC consideration of noise from engine run-up and testing noise activities shall be limited as follows:

a) Aircraft noise associated with pre-flight engine run-ups, taxiing of aircraft to and from runways, and other operation of aircraft on the ground is considered part of airport operations and is not subject to ALUC regulation. Engine testing noise is not normally included in the noise contours prepared for an airport and has not been considered in preparation of the noise contours presented in Figure 3-3. However, the ALUC may consider noise from these sources when reviewing the compatibility of proposed land uses near OAK to the extent that this noise is reflected in airport noise contours approved by the airport proprietor and the ALUC.

b) Noise from aircraft ground operations also should be considered by the ALUC when reviewing airport master plans or development plans in accordance with the mandatory and voluntary review policies discussed in Chapter 2.

c) Noise from the testing of aircraft engines on airport property is not deemed an activity inherent in the operation of an airport, and it is not an airport-related impact addressed by this ALUCP. Noise from these sources should be addressed by the noise policies of local agencies in the same manner as noise from other industrial sources.

TABLE 3-1

NOISE COMPATIBILITY CRITERIA

Land Use Category	Exterior Noise Exposure (dB CNEL)		
	60	65	70
Agricultural, Recreational, and Animal-Related			
Outdoor amphitheaters			
Zoos; animal shelters; neighborhood parks; playgrounds			
Regional parks; athletic fields; golf courses; outdoor spectator sports; water recreation facilities			
Nature preserves; wildlife preserves; livestock breeding or farming			
Agriculture (except residences and livestock); fishing			
Residential, Lodging, and Care			
Residential, (including single-family, multi-family, and mobile homes)*			
Residential hotels; retirement homes; hospitals; nursing homes; intermediate care facilities			
Hotels; motels; other transient lodging			
Public			
Schools; libraries			
Auditoriums; concert halls; indoor arenas; places of worship; cemeteries			
Commercial and Industrial			
Office buildings; office areas of industrial facilities; medical clinics; clinical laboratories; commercial - retail; shopping centers; restaurants; movie theaters			
Commercial - wholesale; research and development			
Industrial; manufacturing; utilities; public rights-of-way			

Land Use	Acceptability	Interpretation/Comments
	Compatible	*Indoor Uses*: Standard construction methods will sufficiently attenuate exterior noise to an acceptable indoor community noise equivalent level (CNEL). *Outdoor Uses*: Activities associated with the land use may be carried out with essentially no interference from aircraft noise. * The maximum acceptable noise exposure for new residential development in the vicinity of OAK is anything below 60 CNEL (see Policy 3.3.1.2 (b).)
	Conditional	*Indoor Uses*: Building structure must be capable of attenuating exterior noise to the indoor CNEL of 45 dB; standard construction methods will normally suffice. *Outdoor Uses*: CNEL is acceptable for outdoor activities, although some noise interference may occur; caution should be exercised with regard to noise-sensitive uses.
	Incompatible	*Indoor Uses*: Unacceptable noise interference if windows are open; at exposures above 65 dB CNEL, extensive mitigation techniques are required to make the indoor environment acceptable for performance of activities. *Outdoor Uses*: Severe noise interference makes outdoor activities unacceptable.

Source: ESA, 2007; *California Airport Land Use Compatibility Handbook* (Caltrans, 2002); PUC 21001 *et seq.*, California State Aeronautics Act.
Note: The layout of this table was created using the framework developed in previous compatibility plans (Mead & Hunt, 2006).

3.3.2 Safety

3.3.2.1 Objective

Land use safety compatibility criteria are developed to minimize the risks to people and property on the ground as well as those people in an aircraft in the event of an accident or emergency landing occurring outside the airport boundary. Policies set forth in this section focus on reducing the potential consequences of such events when they occur. The most stringent land use controls shall be applied to the areas with greatest risk potential.

3.3.2.2 Evaluation

The safety compatibility of proposed uses within OAK's AIA should be evaluated in accordance with the policies set forth in this section, including the safety zones presented on Figure 3-4 and the criteria listed in Table 3-2.

a) The criteria in Table 3-2 indicate whether a particular type of land use is "compatible", "conditional", or "incompatible" with the exposure to aircraft accident risks. The meaning of these terms is provided in the table.

b) Land uses not specifically listed should be evaluated using the criteria for similar listed uses.

3.3.2.3 Measurement

The concept of risk is essential to maintaining a high degree of safety in an airport environment. For the purposes of this ALUCP, the risk that potential aircraft accidents pose to land around OAK shall be defined in terms of the geographic distribution of where accidents are most likely to occur. Due to the infrequency of aircraft accidents, the pattern of accidents at any one airport cannot be used to predict where future accidents are most likely to occur around a particular airport. The safety zones depicted in the *California Airport Land Use Compatibility Handbook* (*Handbook*), and upon which the safety zones in the ALUCP are based, were formulated using the accident distribution patterns presented in the *Handbook* for similar airports nationwide.

3.3.2.4 Factors Determining Safety Criteria

In determining criteria for each safety zone and the overall approach to this compatibility factor, the following issues were considered:

a) Locations, delineated in respect to the runway, where aircraft accidents near general aviation airports typically occur. The most stringent land use controls should be applied to the areas where the greatest risk of aircraft accidents is likely to occur (as delineated by the Caltrans *Handbook*).

b) Runway length and approach categories for each runway at OAK. These factors are reflected in the safety zone shapes and sizes, and are based upon zones suggested in the Caltrans *Handbook*.

c) Encroachment of incompatible land uses. The Caltrans *Handbook* suggests that, "because many general aviation airports are located on the fringes of urban areas, both the threat of new incompatible development and the opportunity for ALUCs to help preserve a compatible airport land use relationship are great." The location of OAK in a dense urban setting amplifies the need to strike a balance between making land use decisions that will benefit both local jurisdictions and the public airport serving them, while preserving the safety of the general public.

3.3.2.5 Airport Safety Zones

A total of seven different safety zones were identified as shown in Figure 3-4. As described above, the choice of safety zone criteria appropriate for a particular zone is largely a function of risk acceptability. Land uses (e.g., schools and hospitals) which, for a given proximity to the airport, are judged to represent unacceptable risks must be prohibited. Where the risks of a particular land use are considered significant but tolerable, establishment of restrictions may reduce the risk to an acceptable level. Uses which are basically acceptable generally require no limitations (see Table 3-2 for a list of compatible land uses within each safety zone).

In certain situations, such as venues accommodating the assemblage of large numbers of people (i.e., sports stadiums, amphitheaters, etc.), the perceived risk of an aircraft accident occurring in a location where large amounts of people have restricted mobility may be perceived as an intolerable risk no matter where it may be located within an AIA.

a) For the purpose of presenting safety policies, each safety zone shall be considered as such:
    - Zone 1: Runway Protection Zones
    - Zone 2: Inner Approach / Departure Zones
    - Zone 3: Inner Turning Zones
    - Zone 4: Outer Approach / Departure Zones
    - Zone 5: Sideline Zones
    - Zone 6: Traffic Pattern Zone
    - Zone 7: Other Airport Environs

As shown on Figure 3-4, most of the safety zones associated with the South Field (commercial runway) extend over the San Francisco Bay. However, Safety Zones 2, 3, and 5 remain over land. The Portions of the safety zones extending over the Bay are provided for illustration purposes only.

3.3.2.6 Residential Development Criteria

The development of new residential land uses is restricted in the following ways:

a) In Safety Zone 1, no new dwellings shall be constructed.

b) In Safety Zones 2, 3, 4, and 5, new dwellings are not recommended within the zone boundaries. However, due to the existing urban nature of the surrounding environs and the existing residential land use, infill may be allowed up to an average of the surrounding residential use (except for high density residential), provided that other safety criteria identified in this plan are satisfied (see Policy 2.7.5.7(a) for infill criteria). Additional criteria for residential development in these zones are as follows:

    1) The minimum adjacent open space required is approximately 0.5 acre (see Policy 3.3.2.11).

    2) Clustering to meet these criteria is recommended for projects of 10.0 acres or more with one 0.5 acre open space area to be provided per each 10 acres of the site.

    3) For projects of less than 10 acres, compliance with the clustering condition is desirable, but not required as a condition for development approval.

    4) The clustering of residential development must not result in the density within any single 1.0-acre area exceeding 20.0 dwelling units per acre.

c) In Safety Zones 6 and 7, residential development is not restricted.

3.3.2.7 Nonresidential Development Criteria

The following criteria apply to most proposed nonresidential development. Separate or additional criteria for land uses of special concern are described in Policy 3.3.2.8. For the purposes of the ALUCP, the primary measure of risk exposure for people on the ground in the event of an aircraft accident is based in the number of people concentrated in areas most susceptible to the risk of aircraft accidents.

a) With respect to the vicinity of OAK, the maximum acceptable intensity of new nonresidential development, including all people (e.g., employees, customers/visitors) who may be at a particular location at any single point in time, both indoor and outdoors, shall be limited to the intensities indicated in Table 3-2. Nonresidential intensity criteria reflect a mix of intensities for rural/suburban and urban settings (as set forth in Table 9C of the Caltrans *Handbook*), which reflects the current environment around OAK.

b) The compatibility of a proposed nonresidential land use shall be evaluated using the land use types listed in Table 3-2.

    1) The nonresidential uses are categorized primarily with respect to the typical occupancy load factor of the use measured in terms of square footage per

occupant. Also indicated in the table is the California Building Code (CBC) classification under which each facility is presumed to be constructed.

2) Proposed development not listed in Table 3-2 shall be evaluated by comparison to a similar use on the list.

c) Land uses shown in Table 3-2 as being considered "compatible" within a particular safety zone are presumed to comply with the intensity limits. However, abnormal examples of these uses may require review to ensure compliance with the criteria.

d) Land use shown as "conditional" should comply with the conditions listed in the table.

1) In circumstances where a floor area ratio limit is cited as a conditional criterion, the limit is based on a typical occupancy level (floor area square footage per person) as defined by the CBC for that use[1]. The assumed occupancy levels are shown in the table.

2) Local jurisdictions may make exceptions for rare, special events for which a facility is not designated and normally not used and for which extra safety precautions can be taken as appropriate.

3) The ALUC may allow intensity bonuses for conditional uses within a particular safety zone when risk-reducing building design techniques are employed. Risk-reduction building features include:

- Concrete walls;
- Limited number and size of windows;
- Upgraded roof strength;
- No skylights;
- Enhanced fire sprinkler system;
- Single-story height; and/or
- Increased number of emergency exits.

In these circumstances, the ALUC should allow no more than 1.5 to 3.0 times the basic intensity (as determined in Table 3-2) required.

3.3.2.8 Land Uses of Particular Concern

Land uses which pose the greatest concern are those in which the occupants have reduced effective mobility or are unable to respond in emergency situations. Children's schools, day care centers, hospitals, nursing homes, and other uses in which the majority of occupants are children, elderly, and/or handicapped shall be prohibited within Zones 1 through 5.

a) For the purposes of these criteria, children's schools include all grades through grade 12.

[1] The equation for determining the appropriate floor area ratio is as follows:
Floor area ratio = $\frac{\text{(allowable usage density)x(occupancy load factor)}}{\text{43,560 square feet in one acre}}$

b) Day care centers and family day care homes are defined by state law. Non-commercial day care centers ancillary to a place of business are permitted in Zones 2 through 5 provided that the overall use of the property meets the intensity criteria indicated below. Family day care homes are permitted in any location where residential development is permitted and the intensity of the day care home is ≤6 people. Commercial day care centers are conditionally compatible in Zone 6.

c) In-patient health care facilities include hospitals, health care facilities, and other types of non-ambulatory medical centers. Land uses of these types are prohibited in Safety Zones 1 through 5, and permissible in Zones 6 and 7.

d) Out-patient health care facilities such as health care centers, clinics, dentists' offices, and other types of ambulatory facilities are conditionally acceptable in Safety Zone 3 and 4 provided that the conditional criteria in Table 3-2 are achieved.

e) Storage of fuel and other hazardous materials within the airport environs are restricted as follows:

    1) Within Zones 1 and 2, storage of any such substance is prohibited.

    2) Within Zones 3, special measures to minimize risk in the event of an aircraft accident are to be determined by the appropriate permitting agency. Aboveground fuel storage of more than 6,000 gallons is prohibited.

3.3.2.9 Mixed-Use Development

If a combination of land use types listed separately in Table 3-2 is proposed for a single project or site, the following policies apply:

a) Where residential and nonresidential uses are proposed to be located in the same or nearby buildings, both residential and nonresidential density criteria must be achieved. The number of dwelling units shall not exceed the density limits indicated in Table 3-2. Both occupancy totals (residential and nonresidential) will be considered with respect to the nonresidential usage intensity criteria cited in the table.

    1) Except as designated below in paragraph (2), this mixed-use development criterion is proposed for dense, urban-type developments where the overall usage intensity and ambient noise levels are relatively high.

    2) Mixed-use development is prohibited where the residential component would be exposed to noise levels exceeding the limits set in Policy 3.3.1.5.

b) Where proposed development will constitute a mixture of nonresidential land uses as identified in Table 3-2, the total number of occupants for all uses shall be added to determine the total number of people on the site. The total number of occupants on the site shall not exceed the maximum set forth in Table 3-2.

1) The number of people for each use shall be estimated to equal the square footage of that use divided by the occupancy load factor (square footage per person) cited in Table 3-2.

2) If an occupancy load factor is not provided for a specific use, the number of occupants may be estimated by using parking space requirements of the affected jurisdiction.

3.3.2.10 Criteria for Clustering of Development

The ALUC generally supports clustering to enhance safety compatibility in the vicinity of airports. Clustering occurs when development is concentrated on one portion of a site or within an overall safety zone, leaving other areas as open space because of terrain, environmental, or other considerations. If the area remaining undeveloped is relatively level and free of large obstacles, clustering provides for a greater amount of open space towards which a pilot can land the aircraft; thus reducing the risk of harm to people on the ground. However, an aircraft still has the potential to strike a clustered site, and as such, limitations on the maximum concentrations of dwellings or people in a small area of a large project site are appropriate.

a) No development shall be clustered in a manner that would exceed the intensity limits listed as incompatible in Table 3-2.

b) An intensity bonus of up to 3.0 times the normal allowable intensity (as described in Table 3-2) can be applied for development that employs risk reduction design standards as described in Policy 2.7.6.7(e).

3.3.2.11 Open Land

In the event of an emergency landing, risks to both people in the aircraft and on the ground can be minimized by providing as much open land as possible in the vicinity of the airport.

a) To be considered “open land”, an area should:

   1) Be free of obstacles such as large trees, walls, or poles, and overhead wires.

   2) Have minimum dimensions of approximately 75 feet by 300 feet (0.5 acre).

b) Open land areas should be oriented with the typical direction of aircraft flight over the location.

c) Roads and automobile parking areas are considered acceptable as open land areas.

d) Open land areas should be identified at the general or specific plan level, or as part of large (greater than 20 acres) development projects.

e) Open land should not preserve or create habitat that could pose hazards to aircraft. For example, wildlife refuges, mitigation banks, wetlands, and other uses that provide habitat or food sources for birds or other wildlife that are hazardous to aircraft operations.

f) Clustering of development, as detailed in Policy 3.3.2.10, is encouraged to increase the amount of open land.

TABLE 3-2
SAFETY COMPATIBILITY CRITERIA

Types of Land Use	Description of Occupancy	Safety Zones							Criteria for Conditional Uses
Note: Multiple categories may apply to same project		**1**	**2**	**3**	**4**	**5**	**6**	**7**	
Maximum Nonresidential Intensity (People/Acre)		10	60	100	100	150	No Limit	No Limit	
Required Open Land		100%	40%	30%	20%	20%	0%	0%	
CBC Groups*									
A-1	High capacity indoor assembly room (≥1,000 people): professional sports arena, concert hall, etc.								Zones 7: Allowable if no other suitable site outside AIA is available.
A-2 - A-2.1	Medium to large indoor assembly room (≥300, <1,000 people): malls, theaters, meeting halls, etc. (approx. 15 s.f./ person)								
A-3	Low capacity indoor assembly room (<300 people) meeting rooms, college or university lecture halls, places of worship, etc. (approx. 60 s.f./ person)			0.14	0.14				Zones 3, 4: Floor area ratio as indicated
A-4	Large outdoor assembly area (>1,000 people): amusement park area, amphitheaters, stadiums, etc.								Zones 6, 7: Allowable if no other suitable site outside AIA is available.
	Medium outdoor assembly area (≥300, <999 people): fair grounds, etc.								Zones 3, 4, 6: Allowable if no other suitable site outside AIA is available.
	Small outdoor assembly area (>50, ≤299 people): camp ground, community pool, etc.								Zones 3, 4, 6: Allowable if no other suitable site outside AIA is available.
B	Office buildings (approx. 215 s.q./ person)		0.30	0.49	0.49	0.74			Zones 2, 3, 4, 5: Floor area ratio as indicated. Also see Policy 3.3.2.7(c)(3).
B	Small eateries/drinking establishments (approx. 60 s.f./ person)			0.14	0.14	0.21			Zones 3, 4, 5: Floor area ratio as indicated. Also see Policy 3.3.2.7(c)(3).
B	Misc. medium sized businesses (approx. 200 s.f./ person): salons, electronics stores, etc.		0.28	0.46	0.46	0.69			Zones 2, 3, 4, 5: Floor area ratio as indicated. Also see Policy 3.3.2.7(c)(3).
E-1 - E-2	Children's schools (K - 12)								Projects to be reviewed on a case-by-case basis. Risk reduction building design per 3.3.2.7 should be implemented.

TABLE 3-2
SAFETY COMPATIBILITY CRITERIA

Types of Land Use	Description of Occupancy	Safety Zones							Criteria for Conditional Uses
Note: Multiple categories may apply to same project		1	2	3	4	5	6	7	
Maximum Nonresidential Intensity (People/Acre)		10	60	100	100	150	No Limit	No Limit	
Required Open Land		100%	40%	30%	20%	20%	0%	0%	
E-3	Commercial Daycare center (≥6 people)								Projects to be reviewed on a case-by-case basis. Risk reduction building design per 3.3.2.7 should be implemented.
F-1, 2	Manufacturing, research and development (300 s.f./ person)[1]			0.69	0.69	1.03			Zones 3, 4, 5: Floor area ratio as indicated. Also see Policy 3.3.2.7(c)(3).
H-1, 2, 3, 4, 5, 6, 7	Occupancies utilizing hazardous (flammable, explosive, corrosive, or toxic) materials								Zones 3 - 5: Special measures to minimize risk in the event of an aircraft accident to be determined by permitting agencies
I-1.1	Nurseries for full-time care of children (≤14 people)								
I-1.1 - I-1.2	Health care facilities: hospitals, health care centers, sanitariums, nursing homes for nonambulatory patients, etc. (approx. 250 s.f./ person)								
I-2	Congregate care facilities (>5 patients): nursing homes for ambulatory patients, assisted living facilities (approx. 100 s.f./ person)								
I-3	Jails, prisons, mental institutions, etc.								Zones 6, 7: Allowable if no other suitable site outside AIA is available.
M	Mixed use retail centers with restaurant facilities (approx. 110 s.f./ person)		0.15	0.25	0.25	0.38			Zones 2, 3, 4, 5: Floor area ratio as indicated
	Retail center with no restaurant facilities (approx. 170 s.f./ person)		0.23						Zones 2: Floor area ratio as indicated
R-1, R-2	Short-term lodging Facilities (≤ 30 nights): hotels, motels, etc. (approx. 200 s.f./person)			0.46	0.46				Zones 3,4: Floor area ratio as indicated
	Long-term lodging facilities (> 30 days): extended-stay hotels, dormitories, etc.								
R-2.1-2.1.1	Residential care facilities for the elderly (<6, ≥6 non-ambulatory clients)								

TABLE 3-2
SAFETY COMPATIBILITY CRITERIA

Types of Land Use	Description of Occupancy	Safety Zones							Criteria for Conditional Uses
Note: Multiple categories may apply to same project		1	2	3	4	5	6	7	
Maximum Nonresidential Intensity (People/Acre)		10	60	100	100	150	No Limit	No Limit	
Required Open Land		100%	40%	30%	20%	20%	0%	0%	
R-2.2 - 2.2.1	Residential care facilities for the elderly (<6, ≥6 ambulatory clients)								
R-2.3 - 2.3.1	Residential-based hospice facilities (<6, ≥6 bedridden clients)								
R-3	Low density residential (0 – 8 d.u./ acre[2])								See Policy 3.3.2.6 (b) (1) – (4)
	Medium density residential (8 – 21 d.u./ acre[2])								See Policy 3.3.2.6 (b) (1) – (4)
	High density residential (21 – 30 d.u./ acre[2])								
S-1	Storage of hazardous materials: gas stations, etc.								Zones 3 – 5: See policy 3.3.2.8 (e)(2).
S-2	Warehouses, distribution facilities (approx. 500 s.f./ person)		0.69	1.15					
S-3	Repair garages not requiring use of flammable objects								
S-4	Open parking garages								
U-1	Private garages, carports, and agricultural buildings								
U-2	Tanks and towers								See Section 3.3.3 for airspace protection policies
Other Types of Land Uses									
Agriculture	Truck and specialty crops[3]								
	Field crops (grains, rice, but no stalk crops)								
	Field crops (corn and other stalk crops)[3]								
	Pasture and range land								
	Orchards and vineyards[3]								
	Dry farm and grain[3]								
	Tree farms, landscape nurseries, and greenhouses								
	Fish farms								
	Feed lots and stockyards								
	Poultry farms								
	Dairy farms								
Natural Uses	Forest reserves								
	Fish and game reserves								
	Land reserves and open space								
	Waterways (rivers, creeks, swamps bays, lakes)[3]								Zone 7: Refer to FAA Advisory Circular 150/5200-33B for

TABLE 3-2
SAFETY COMPATIBILITY CRITERIA

Types of Land Use	Description of Occupancy	Safety Zones							Criteria for Conditional Uses
Note: Multiple categories may apply to same project		1	2	3	4	5	6	7	
Maximum Nonresidential Intensity (People/Acre)		10	60	100	100	150	No Limit	No Limit	
Required Open Land		100%	40%	30%	20%	20%	0%	0%	
									appropriate mitigation.
Recreation	Golf courses[3]								Zone 7: Refer to FAA Advisory Circular 150/5200-33B for appropriate mitigation.
	Parks (i.e., playgrounds, picnic areas, athletic fields, tennis courts, etc.)[3]								Zones 2 – 4: See airspace protection policies in Section 3.3.3. Avoid vegetation and water uses that attract wildlife.
	Riding stables and trails								
	Marinas								
Utilities	Roadways								Zone 1: Not allowed in Object Free Area
	Reservoirs								
	Water treatment[3]								Mitigation required to prevent attraction of wildlife hazards
	Electrical substations[4]								Zone 3: Allowable if no other suitable site outside AIA is available.
	Power plants[4]								Zone 7: Allowable if no other suitable site outside AIA is available. Also see Policy 3.3.3.7(b).
	Power lines[4]								

	Compatible: Use is acceptable without conditional restraints (noise, airspace protection, and/or overflight limitations may still apply)
	Conditional: Use is considered acceptable if listed conditions are met
	Incompatible: Use should not be permitted under any circumstances

*** CBC Groups:** Describes building occupancy types established by the California Building Code (see Appendix D)
[1] These uses may generate dust, smoke, or other hazards to flight. Also see Section 3.3 for applicable policies.
[2] Ranges for dwelling units per acre derived from ranges similar to zoning from jurisdictions within OAK AIA.
[3] These uses may attract birds or other wildlife considered potentially hazardous to flight.
[4] Power lines, smoke stacks, or other tall objects associated with these uses may be hazards to flight. Also see Section 3.3

Source: ESA, 2007; *California Airport Land Use Planning Handbook* (Caltrans, 2002); California Building Code, 2001.
Note: The layout of this table was created using the framework developed in previous compatibility plans (Mead & Hunt, 2006).

3.3.3 Airspace Protection

3.3.3.1 Objective

Similar to safety policies, airspace protection criteria is intended to reduce the risk of harm to people and property resulting from an aircraft accident. This is accomplished by the establishment of compatibility policies that seek to prevent the creation of land use features that can be hazards to the airspace used by aircraft in flight and have the potential to cause an aircraft accident to occur. Such hazards may be physical, visual, or electronic.

3.3.3.2 Evaluation

Tall structures, trees, other objects, or high terrain on or near airports, may constitute hazards to aircraft. Federal regulations establish the criteria for evaluating potential obstructions. These regulations require that the FAA be notified of proposals related to the construction of potentially hazardous structures (see Appendix C). The FAA conducts aeronautical studies of proposed projects to determine whether they would pose risks to aircraft, but it does not have the authority to prevent their construction. The purpose of ALUC airspace protection policies, together with regulations established by local land use jurisdictions and the state government, is to avoid the creation of hazards to the navigable airspace. The policies set forth in this section apply to the entire AIA.

3.3.3.3 Measurement

FAR Part 77, *Objects Affecting Navigable Airspace*, provides guidance for the height of objects that may affect normal aviation operations. The guidance provided by Part 77 is not absolute, however. Deviation from the Part 77 standards does not necessarily mean that a proposed object is prohibited from construction, only that the offending object must be evaluated by the FAA and that mitigative actions, such as marking or lighting may be required. Figure 3-5 depicts the Part 77 surfaces in the vicinity of OAK.

3.3.3.4 Factors Determining Airspace Protection Criteria

As described above, airspace protection policies rely upon regulation enacted by FAA and the state of California; ALUC policies are intended to help implement the federal and state regulations.

a) FAA has well-defined standards by which potential hazards to flight, especially airspace obstructions, can be assessed. However, FAA has no authority to prevent the creation of such hazards; that authority rests with state and local officials.

b) California airspace protection standards mostly mirror those of the FAA; the primary difference being that state law gives the California Department of Transportation, Division of Aeronautics and local agencies the authority to enforce the standards.

3.3.3.5 FAA Notification

Proponents of a project that may exceed the elevation of a Part 77 surface must notify the FAA as required by FAR Part 77, Subpart B, by the State Aeronautics Act, and by Public Utilities Code Sections 21658 and 21659.

a) Local jurisdictions shall inform project proponents of the requirements for notifying the FAA.

b) FAA review is required for any proposed structure more than 200 feet above the ground level of its site. All such proposals also shall be submitted to the ALUC for review regardless of where in the county the object would be located.

c) Any project submitted to the ALUC for airport land use compatibility review for reasons of height issues shall include a copy of FAR Part 77 notification to the FAA and the results of the FAA's analysis.

d) FAA notification shall not automatically trigger an airport compatibility review of a project by the ALUC, unless the general plan of the jurisdiction in which the project is located has not been deemed compatible with this ALUCP.

3.3.3.6 Obstruction Marking and Lighting

FAA or the California Division of Aeronautics will determine the need for marking and lighting of obstructions as part of aeronautical studies conducted in accordance with FAR Part 77. Under most circumstances, when reviewing proposed structures that exceed the height criteria, The ALUC is expected to abide by the FAA's conclusions regarding marking and lighting requirements. However, situations may arise in which the ALUC, because of its particular knowledge of local airports and airspace, may reach a different conclusion than the FAA. In such instances, the ALUC may determine either that a proposed structure is unacceptable or that it is acceptable only with appropriate marking and lighting. Any marking and lighting that the ALUC may require shall be consistent with FAA standards as to color and other features.

3.3.3.7 Other Flight Hazards

Land uses that may cause visual, electronic, navigational, or bird strike hazards to aircraft in flight shall be allowed within the airport influence area only if the uses are consistent with FAA rules and regulations.

a) Specific characteristics to be avoided include:

    1) Glare or distracting lights that could be mistaken for airport lights;

    2) Sources of dust, heat, steam, smoke, or thermal plumes that may impair pilot vision or create turbulence within the flight path;

3) Sources of electrical or other interference that could affect aircraft communications or navigation; and

4) Any proposed use that creates an increased attraction for wildlife and that is inconsistent with FAA rules and regulations including, but not limited to, FAA Order 5200.5A, *Waste Disposal Sites On or Near Airports*, and Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports*. Land uses with the possibility of attracting hazardous wildlife include landfills and certain recreational or agricultural uses that attract large flocks of birds..

b) Due to their propensity to generate smoke, steam, and other visual and physical hazards to aircraft in flight, power plants should be avoided in the AIA. However, given the varying types of power plants (i.e., thermal, solar, wind, etc.), proposed land uses of this kind within the AIA should be evaluated on a case-by-case basis, and in accordance with FAA criteria and the policies set forth in this Plan.

c) In order to resolve any uncertainties or differences with regard to the significance of the above types of flight hazards, local agencies should consult with FAA officials and OAK management.

3.3.3.8 Avigation Easement Dedication

Avigation easements transfer certain property rights from the owner of a property to the owner of the airport (i.e., the Port of Oakland). ALUCs may recommend the dedication of an avigation easement as a condition for approval of development on property to restrict the heights of structures or trees. Avigation easements should be dedicated to the airport owner as a condition for any discretionary local approval of any residential or non-residential development within the area indicated on Figure 3-6.

a) The avigation easement shall:

1) Identify the potential hazard associated with the proposed project and its location within protected airspace;

2) Identify the airport owner’s right to clear or maintain the airspace from potential hazards;

3) Identify the right to mark potential obstructions and notify aviators of such hazards; and

4) Provide the right to pass within the identified airspace.

b) Neither a separate overflight easement nor a separate real estate disclosure is required for properties for which an avigation easement is required.

c) An example of an avigation easement is provided in Appendix E.

3.3.4 Overflight

3.3.4.1 Objective

Noise from the overhead flight of aircraft can be annoying and intrusive in locations beyond the limits of the noise contours identified in Section 3.3.1. While sensitivity to aircraft overflights will vary from person to person, the basic intent of overflight policies is to warn people near an airport of the presence of aircraft so that they have the ability to make informed decisions regarding the acquisition or lease of property within the influence area of an airport.

3.3.4.2 Evaluation

Unlike other compatibility factors such as noise, safety, or airspace protection, overflight compatibility policies do not restrict how land can be developed or used; rather, the policies in this section form the requirements for notification about airport proximity and aircraft overflights. These policies are to be applied with local agency approval of new development. The boundaries of the overflight zones around OAK are identified in Figure 3-6.

3.3.4.3 Measurement

Determining the boundaries of overflight noise exposure is difficult to determine as these locations extend well beyond the defined CNEL contours normally associated with areas of high noise exposure. The general locations over which aircraft routinely fly, including when they approach and depart an airport is generally used as an indicator of overflight annoyance concern. Furthermore, the FAA has determined that for the purposes of NEPA changes in Aircraft Flight tracks below 3,000 feet, AGL require more rigorous environmental review than those changes occurring above 3,000 feet AGL.

3.3.4.4 Factors Determining Overflight Criteria

In determining the overflight criteria for OAK, the following factors were considered:

a) Limitations of ALUC authority of existing land uses. In order to be most effective, overflight policies would ideally apply to all real estate transactions; existing and new. However, the ALUC only has authority to set requirements for new development and to define the boundaries within which real estate transfer disclosure under state law is appropriate.

b) Need for continuity of real estate disclosure to future property owners and tenants. It is recommended that real estate notifications run with the land and is provided to prospective future owners and tenants.

c) Excessiveness of avigation easement dedication used solely for buyer awareness purposes. Avigation easements require the conveyance of property rights from the owner

to the party owning the easement, and as such, are best suited to locations where land use restrictions for noise, safety, or airspace protection is necessary.

3.3.4.5 Overflight Notification

As a condition for local agency approval of new residential land use development within the zone indicated on Figure 3-6, an overflight notification should be recorded.

a) The overflight notification should contain the language provided by state law with regard to real estate transfer disclosure (see Policy 3.3.4.6) and should be of a format similar to that indicated in Appendix E.

b) The notification should be evident to prospective buyers of the property and should appear with the property deed.

c) A separate overflight notification is not required where an avigation easement is provided.

d) Recording of an overflight notification is not required for nonresidential development.

3.3.4.6 Buyer Awareness Measures

Effective as of January 1, 2004, California state statutes (Business and Professional Code Section 11010 and Civil Code Sections 1102.6, 1103.4, and 1353) mandate that sellers or leasers of real property must disclose information regarding whether their property is situated within an AIA.

a) These state requirements apply to the sale or lease of subdivided lands and condominium conversions and to the sale of certain existing residential property.

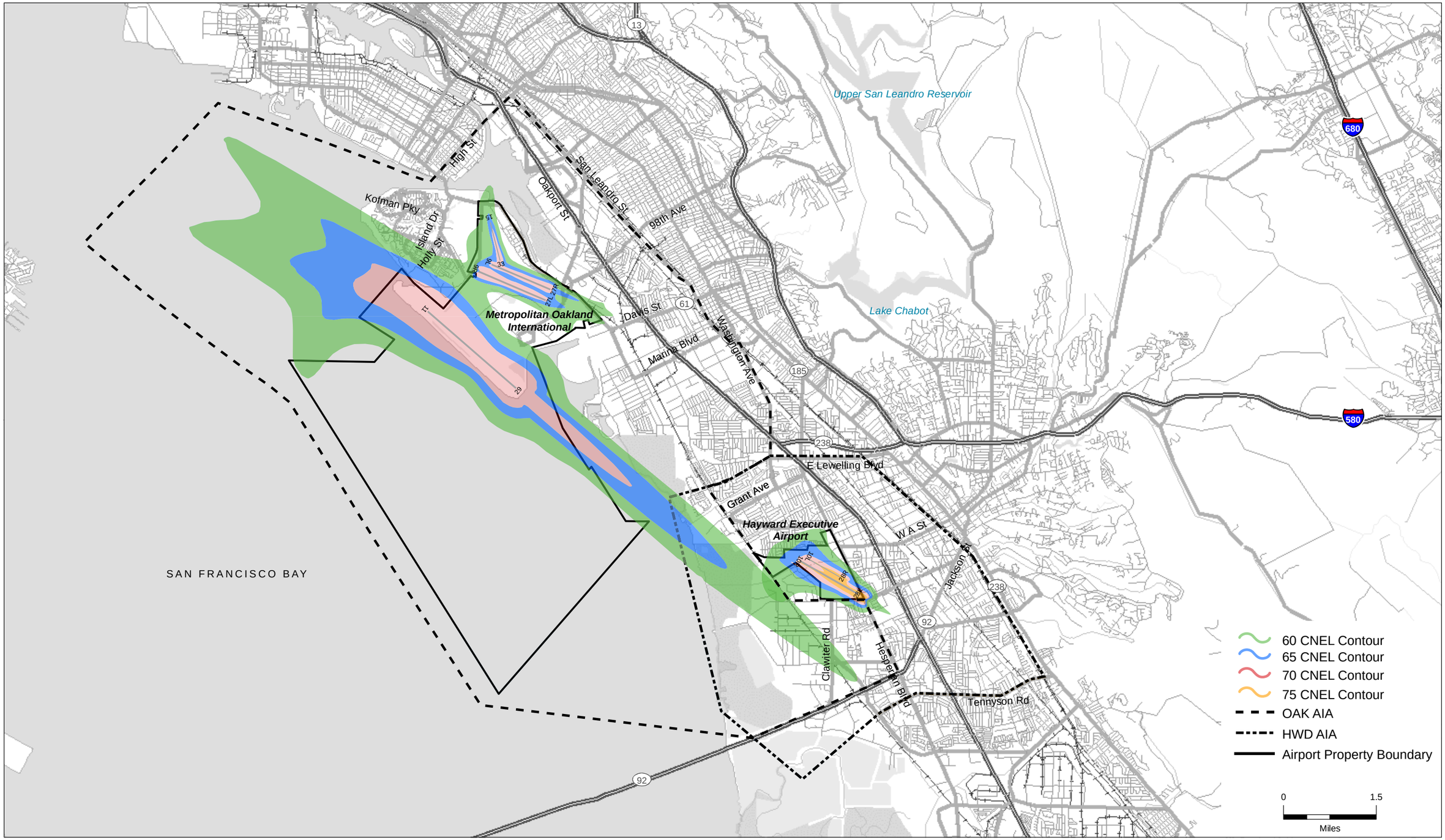
b) Where disclosure is required, the state statutes dictate that the following statement shall be provided:

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

c) Although not mandated by state law, the recommendation of this ALUCP is that the airport proximity disclosure should be provided as part of all real estate transactions involving private property (both new and existing) within the airport influence area.

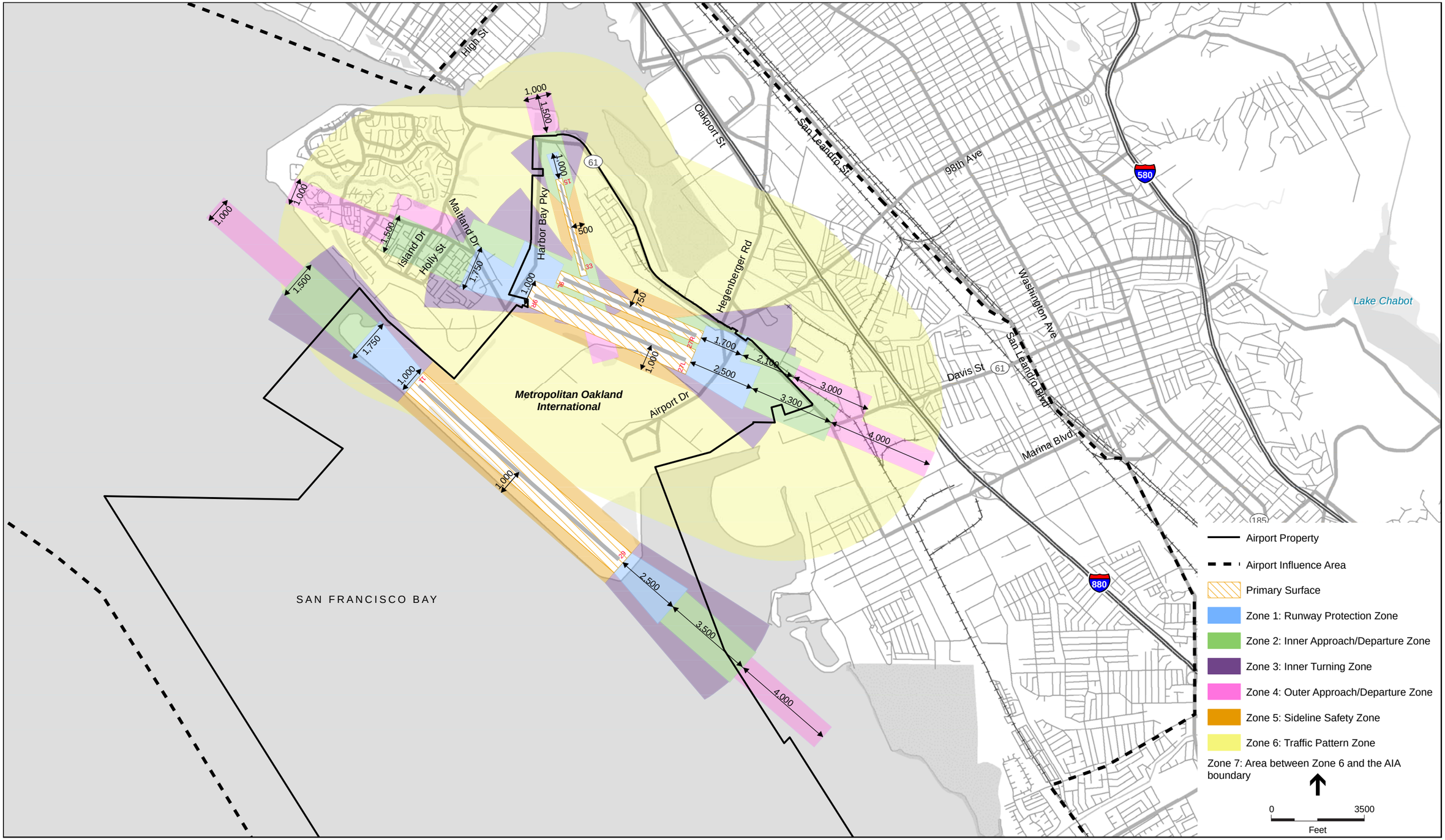
This page left intentionally blank.



SOURCE: ESA Airports, ESRI, OAK Airport Master Plan, Caltrans California Airport Land Use Planning Handbook, 2002

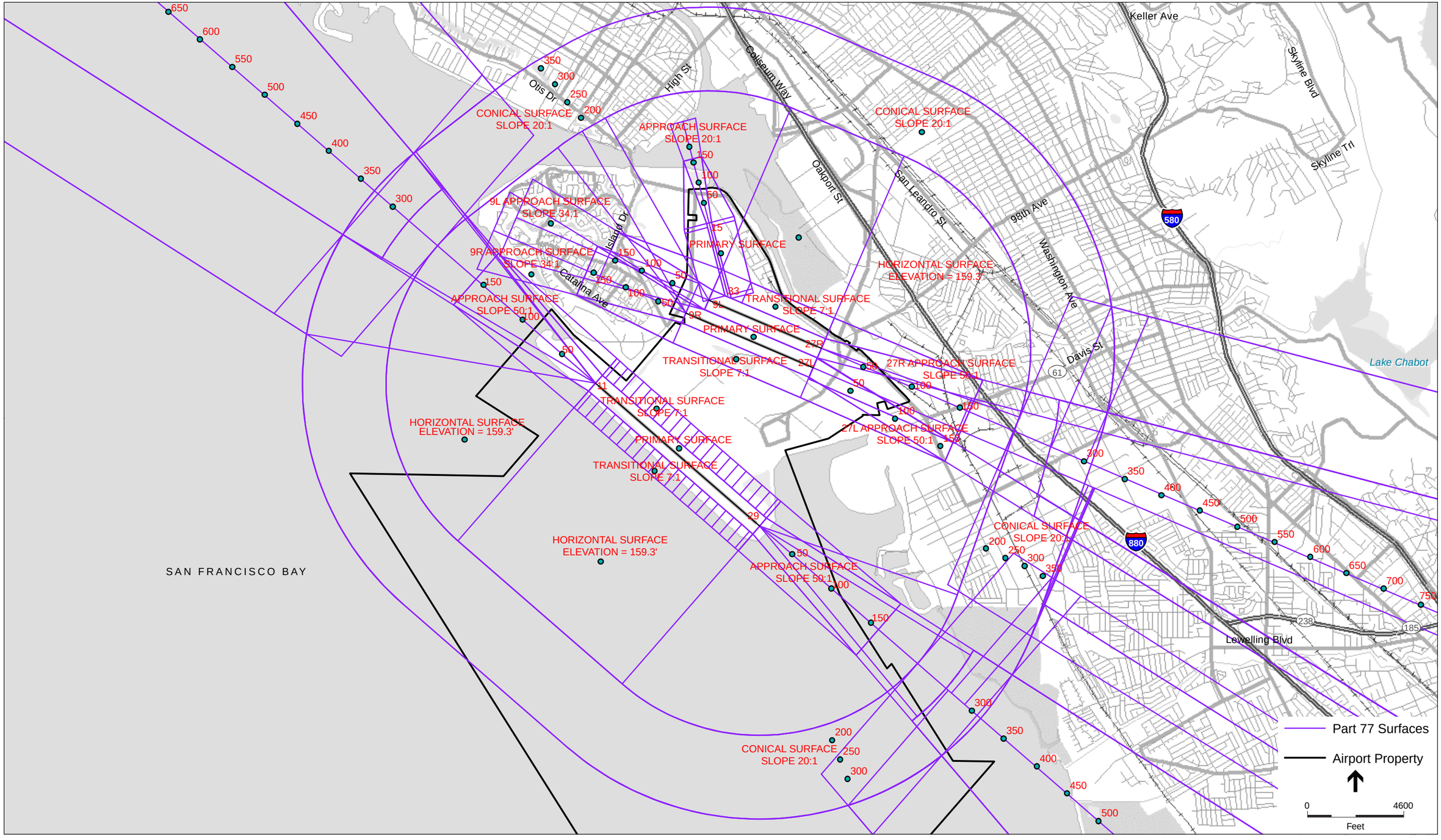
Oakland International Airport Land Use Plan Update . 202229

Figure 3-3
Noise Compatibility Zones



SOURCE: ESA Airports, ESRI, OAK Airport Master Plan, 2006, Caltrans California Airport Land Use Planning Handbook, 2002

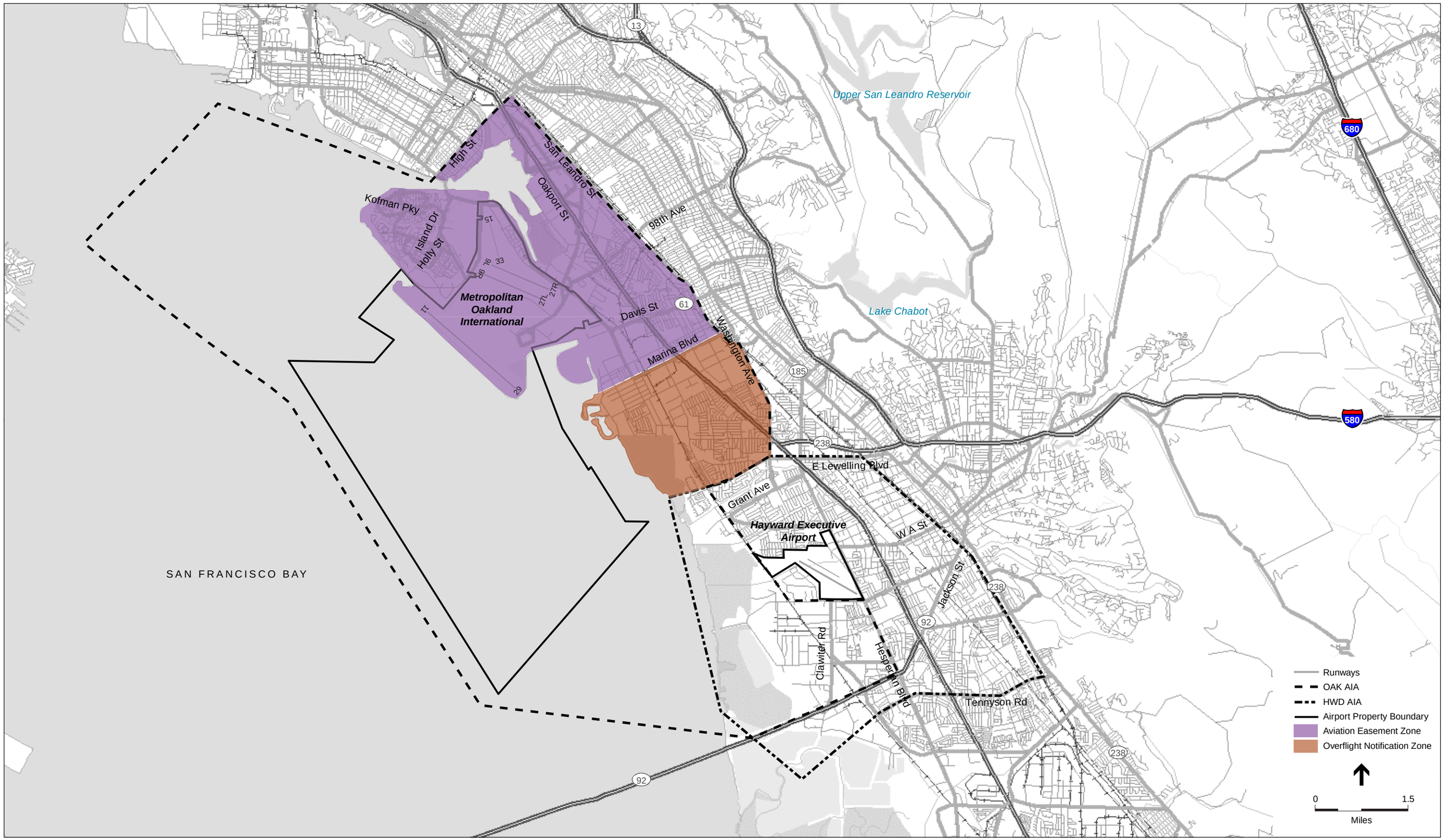
Figure 3-4
Safety Compatibility Zones



SOURCE: ESA Airports, ESRI, OAK Airport Master Plan, 2006

Figure 3-5

Oakland International Airport FAR Part 77 Sufaces



SOURCE: ESA Airports, ESRI, OAK Airport Master Plan, 2006

Figure 3-6

OAK Overflight Compatibility Zones

CHAPTER 4
Oakland International Airport and Vicinity Data

4.1 Introduction

Oakland International Airport (OAK) is located in Alameda County approximately 7 nautical miles east of the City of San Francisco (see Figure 1-1). The Airport is situated on the southwestern edge of the City of Oakland, a city with a population of 397,067 residents as of 2006[1].

Construction of Oakland Municipal Airport (what is now North Field) began in June of 1927; part of which included the building of a 7,020 foot runway, the longest in the world for its day. Over the next 15 years leading up to World War II, multiple additions were made to the airport, including five hangars, passenger terminal/administrative offices, and a restaurant. During World War II, Oakland Municipal Airport was used as the marshalling point for all planes bound for the U.S. forces in the Pacific. In 1945, a parallel 6,200-foot east-west runway was constructed.

After World War II, OAK was returned to the Port of Oakland. In 1960, construction began on a new 10,000 foot jet runway and facilities complex south of the OAK's existing facilities. The new 600-acre complex would consist of a passenger terminal topped by a ten-story control tower, a separate air cargo building, and a jet hangar. In 1962, the new OAK facilities opened to the public. Since all the renovation in the 1960's, OAK has continued to grow, establishing itself as an important economic resource in the Bay Area. A second passenger terminal was completed in 1985 and expanded in 2007. OAK handled 14.5 million passengers and nearly 700,000 tons of air cargo in 2007.

4.2 Surrounding Airport Environs

4.2.1 Jurisdictions

Oakland International Airport (OAK) is owned and operated by the Port of Oakland, an autonomous department of the City of Oakland, under the exclusive control and management of the Board of Port Commissioners.

[1] U.S. Census Bureau, www.census.gov, 2007.

4.2.2 Adjacent and Surrounding Land Uses

Figures 4-1 and 4-2 represent generalized land uses and zoning, respectively, in the OAK AIA. Due to the fact that the cities of Alameda and Oakland combined their land use and zoning maps, the data presented in this figure has been generalized in order to fit the format of other jurisdictions within the AIA. More detailed land use maps are available through each jurisdiction encompassed by the OAK AIA.

OAK is bound to the east by Metropolitan Golf Links, Chuck Corica Municipal Golf Complex to the west, Doolittle Drive to the north, and San Francisco Bay to the west. As shown in Figure 4-1, land uses in the vicinity of OAK include commercial, industrial, and urban open-space uses. No residential uses are adjacent to airport property. Within the City of Oakland, heavy industrial uses predominate to the north and northeast of the airport, with two sports arenas and residential land uses beyond that. To the southeast is the City of San Leandro and a mix of natural, industrial, and residential land uses. Beyond the City of San Leandro is the unincorporated community of San Lorenzo, and south of San Lorenzo is the City of Hayward. Bay Farm Island, a residential community of the City of Alameda, is north of OAK.

To the north of OAK and within the City of Oakland, is the residential neighborhood of Elmhurst. Southeast of the airport in the City of San Leandro, are the neighborhoods of Little Alaska, Mulford Gardens, and Marina Faire; all of which are west of Doolittle Drive. Additional residential land uses in San Leandro, referred to as the Davis, Eastshore, Davis West, Cherrywood, Manor, and Bonaire neighborhoods, can be found either east or west of Interstate 880. Northwest of OAK is Bay Farm Island, a collection of residential neighborhoods which are a part of the City of Alameda. Polices and land use regulations associated with these neighborhoods are contained within land use elements or specific plans of the cities of Oakland, San Leandro, and Alameda.

In the eastern vicinity of OAK, the predominant zoning is industrial. Industrial uses near OAK can be found along Edgewater Drive, Oakport Street, and Pardee Drive in the City of Oakland. Commercial uses associated with Airport Business Park to the north of Hegenberger Road are owned by the Port of Oakland. One-family, apartment, and medium-density residential zoning are east and southeast of the airport. In the City of San Leandro, the primary zoning found within the vicinity of OAK is industrial, with a mix of residential multi-family and single-family districts as well. Further south, in the City of Hayward, the predominate zoning within the OAK AIA is industrial, with some single family residential, commercial, and planned development as well. The majority of zoning districts in the City of Alameda (including Bay Farm Island) is a mix of residential and commercial, with an emphasis on one-family residential uses towards the center of the community and general industrial zoning on the outskirts.

4.2.3 Alameda County Land Uses

The residential community of San Lorenzo, an unincorporated area of Alameda County, is located south of OAK. This unincorporated urban community is part of the Eden Planning Unit of the County and is zoned for single family residence (R-1) by the County (see Figure 4-2).

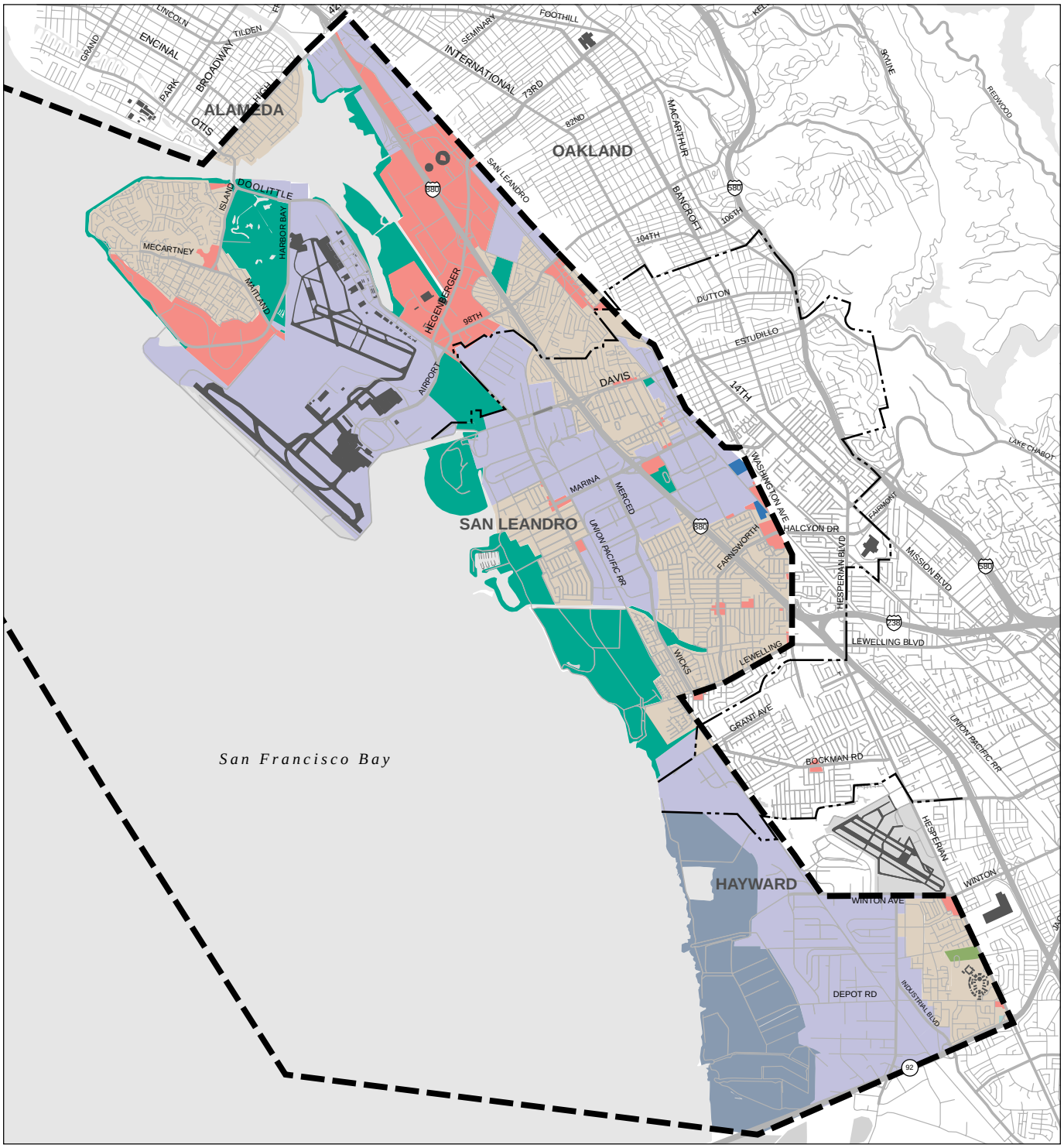
4.2.4 Noise-Sensitive Land Uses

The portion of the City of Oakland within OAK's AIA contains numerous noise-sensitive land uses. These include: Martin Luther King Jr. Regional Park, Brookfield Village Park, Columbian Gardens Park, Tyrone Carney Park, Sobrante Park, Brookfield Elementary School, Sobrante Park Elementary, Madison Middle School, and several places of worship.

Noise-sensitive land uses in the City of Alameda's Bay Farm Island community within OAK's AIA include: Tillman Park, Leydecker Park, Godfrey Park, Doc Harrington Park, Amelia Earhart Elementary, Chinese Christian School, a daycare center, and several places of worship.

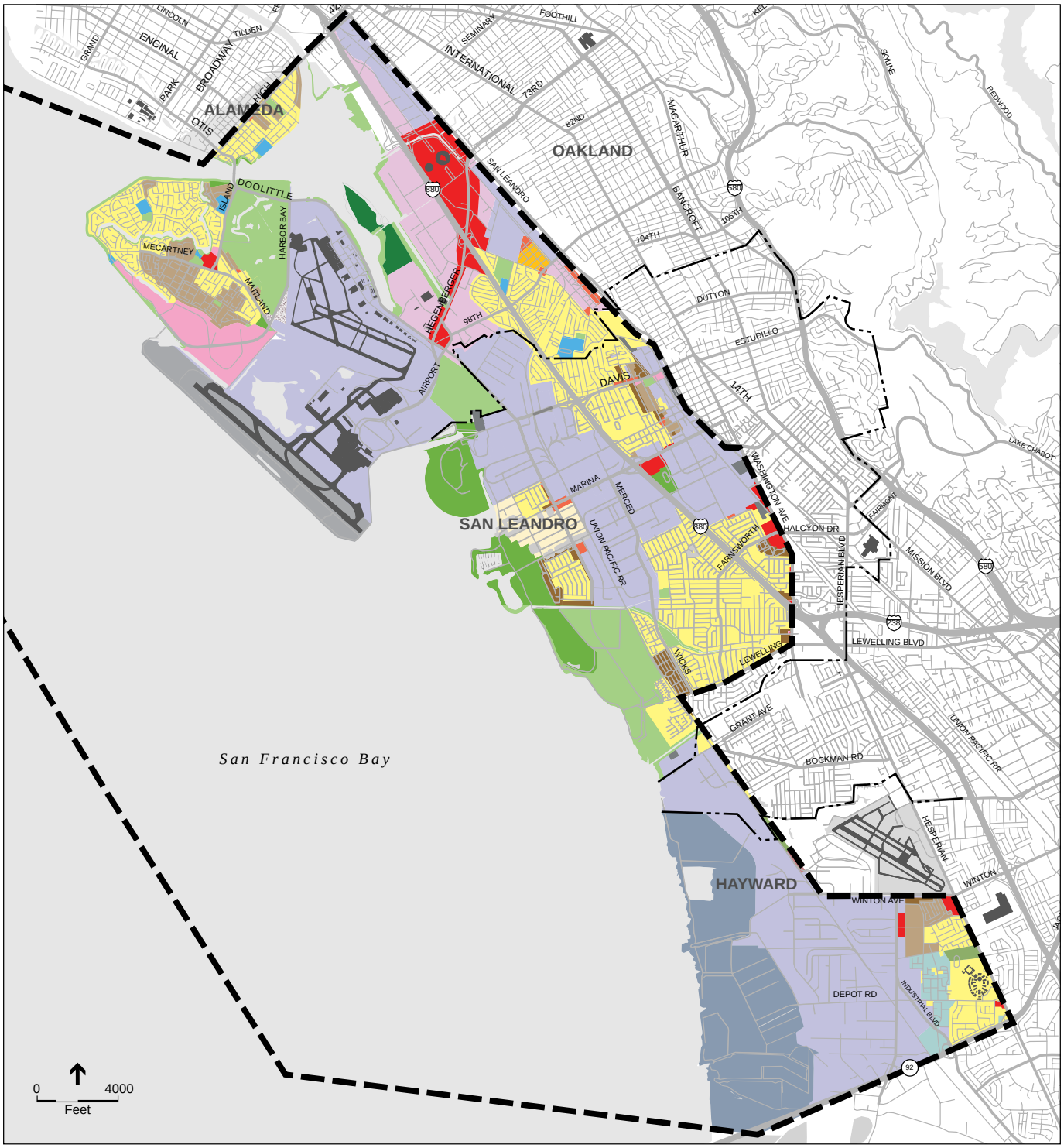
South of the Airport, in the City of San Leandro, noise-sensitive land uses within the AIA include: Oyster Bay Regional Shoreline, Cherry Grove Park, Thrasher Park, Mulford Park, Pacific Recreation Complex, Marina Park, Bonaire Park, Floresta Park, Stenzel Park, Dayton Playground, Washington Manor Park, Lewelling Playground, Grover Cleveland School, John Muir Middle School, Woodrow Wilson Elementary School, Garfield Elementary School, Pacific High School, James Madison School, Corvallis Elementary, Monroe Elementary School, Marina High School, Saint Felicitas School, Redwood Christian High School, Washington Manor Elementary School, Burbank Preschool, and numerous places of worship.

Beyond the City of San Leandro, in the unincorporated community of San Lorenzo, noise-sensitive land uses within OAK's AIA include: Mervin Morris Park, Del Rey Park, San Lorenzo Park, Arroyo High School, Bay Elementary School, and Del Rey Elementary School.



SOURCE: City of Alameda, 1991; City of Hayward, 2002; City of Oakland, 2005; City of San Leandro, 2002; County of Alameda, 2004; Thomas Brothers Maps; and ESA, 2007

Figure 4-1
Generalized Land Use in Vicinity of Oakland International Airport



SOURCE: City of Alameda, 2001; City of Hayward, 2007; City of Oakland, 2005; City of San Leandro, 2007; County of Alameda, 2004; Thomas Brothers Maps; and ESA, 2007

Figure 4-2
Generalized Zoning in Vicinity of Oakland International Airport

4.2.5 Future Airport Vicinity Land Uses

OAK is located in the southwestern portion of the City of Oakland, and the AIA includes portions of the cities of Alameda, San Leandro, and Hayward, as well as unincorporated areas of Alameda County. OAK is identified in the *City of Oakland General Plan's Land Use and Transportation Element* as part of the East Oakland planning area, which is an area bound by High Street to the north, I-580 to the east, the city border between Oakland and San Leandro to the south, and the San Francisco Bay to the west. The City's *General Plan* identifies portions of this planning area within OAK's AIA for development and re-development opportunities, which primarily involve commercial and industrial land uses. Residential uses, which primarily occur in the Elmhurst area, are identified in the *General Plan* for revitalization programs and urban design assistance, but further intensification is not recommended in the Plan.

Bay Farm Island, the portion of the City of Alameda within OAK's AIA, is predominately residential uses, with some commercial and industrial uses at the edges of Bay Farm Island.

4.3 Land Use Regulations and Policies

The State of California requires all local governments to enact a general plan which establishes policies to guide future development of the city or county. The policies of the general plan are implemented through ordinances regulating development, including the zoning ordinance, which regulates the use of land, the density of development, and the height and bulk of buildings. Local governments also regulate development through building codes which set detailed standards for construction.

This section summarizes goals, objectives, and policies of the Cities of Oakland, San Leandro, Alameda, and Hayward and Alameda County that are applicable to airport land use compatibility for OAK.

4.3.1 City of Oakland General Plan Land Use and Transportation Element, Adopted March of 1998, Amended through 2015

The *City of Oakland General Plan Land Use and Transportation Element* was updated in 1998. No significant changes to land use patterns are proposed as part of the *General Plan*. The *General Plan* designates land uses in the vicinity of the airport as commercial, light industrial, hotel, and office uses. The predominant zoning in the vicinity of OAK is industrial.

The *City of Oakland Land Use and Transportation Element* states the following airport land use compatibility related policies:

Seaport and Airport Objectives and Policies

W6.2 Development of sites proximate to airport flight paths should be in conformance with Federal and State standards, as articulated in Federal Aviation Regulation, Part 77 and Part 150, ALUC planning guidelines, and any other applicable regulations and amendments.

W7.1 Outside the seaport and airport, land should be developed with a variety of uses that benefit from the close proximity to the seaport and airport and that enhance the unique characteristics of the seaport and airport. These lands should be developed with uses which can buffer adjacent neighborhoods from impacts related to such activities.

W7.2 Other commercial and industrial uses should be encouraged at appropriate locations (Port-owned or not) where they can provide economic opportunity to the community at large.

Housing Production, Conservation, and Enhancement Objectives and Policies

N3.9 Residential developments should be encouraged to face the street and to orient their units to desirable sunlight and views, while avoiding unreasonably blocking sunlight and views for neighboring buildings, respecting the privacy needs of residents of the development and surrounding properties, providing for sufficient conveniently located on-site open space, and avoiding undue noise exposure.

Residential and Non-Residential Activities Objectives and Policies

N5.2 Residential areas should be buffered and reinforced from conflicting uses through the establishment of performance-based regulations, the removal of non-conforming uses, and other tools.

4.3.2 City of Oakland General Plan Noise Element, Adopted June 2005

The City of Oakland's original *General Plan Noise Element* was adopted in 1974. Since then, Oakland's land use patterns have changed, and its population and economy have expanded. In 2005, as a response to this growth, the City has updated the *Noise Element*, and many of its policies, in an effort to protect Oakland residents from exposure to excessive noise levels. Like most cities, the City of Oakland's major noise sources are transportation activities; specifically, motor vehicle traffic on major thoroughfares, rail activity, and operations from nearby airports.

The 2005 *City of Oakland General Plan Noise Element* includes a number of policies that are related to aircraft and airport noise. These include the following relevant policies:

Policy 1: Ensure the compatibility of existing and, especially, of proposed development projects not only with neighboring land uses, but also with their surrounding noise environment.

1.3 Continue working with the Alameda County Community Development Agency (in its role as the County's Airport Land Use Commission) and with the Port of Oakland to ensure consistency with the County's airport land use plan of the City's various master planning documents, zoning ordinance and land-use development proposals near Oakland's airport.

Policy 2: Protect the noise environment by controlling the generation of noise by both stationary and mobile noise sources.

2.3 Encourage the Port of Oakland to continue promoting its noise abatement office and programs for Oakland International Airport.

4.3.3 City of San Leandro General Plan, Adopted in 2002, Amended through 2015

The *City of San Leandro General Plan* was updated in 2002. No significant land use changes to land use patterns are proposed as part of the *General Plan*. The *General Plan* designates land uses in the vicinity of the airport as commercial uses, light industrial, and residential. The predominant zoning in the vicinity of OAK is industrial.

The *City of San Leandro General Plan* states the following airport land use compatibility related policies:

3.10 Conversion of Non-Residential Land to Housing and Public Uses

Encourage the development of new housing on underutilized commercial and industrial sites which meet the following criteria: …Sites which are not constrained by external environmental factors, including freeway, railroad, and airport noise.

37.01 Monitoring of Airport Plans

Actively and aggressively participate in forums and discussions regarding operations and expansion plans for Oakland International Airport. Seek local representation on task forces, commissions, and advisory boards established to guide airport policies and programs.

37.02 Mitigation of Airport Noise

Pursue mitigation of airport noise impacts to the fullest extent possible. Support and advocate for operational practices, changes to aircraft, new technologies, and physical improvements that would reduce the number of properties in San Leandro that are impacted by noise.

37.06 Airport Safety Zones

Regulate land uses within designated airport safety zones, height referral areas, and noise compatibility zones to minimize the possibility of future noise conflicts and accident hazards.

4.3.4 City of Alameda General Plan, Adopted in 1991, Amended through 2010

The *City of Alameda General Plan* was updated in 1991. No significant land use changes to land use patterns are proposed as part of the *General Plan*. The *General Plan* designates land uses in the vicinity of the airport as residential uses, commercial, and light industrial. The predominant zoning in the vicinity of OAK is residential.

4.3.4.1 Airport Environs Element

The *City of Alameda General Plan Airport Environs Element* states the following airport land use compatibility related policies:

Guiding Policies: Airport Impact Areas

7.2.a Regulate development in Alameda to minimize hazards in safety zones designated by the Alameda County Airport Land Use Commission.

7.2.b Do not approve incompatible development in noise/safety sensitive areas.

7.2.c Seek ways to ensure provision of effective sound mitigation for all housing units in noise impact areas.

7.2.e Ensure that purchasers of property currently or potentially subject to normally unacceptable noise levels are aware of such conditions, of City policies regarding mitigation, and of limitations to the City's ability to abate nuisances when such properties are subject to an avigation easement.

4.3.5 City of Hayward General Plan, Adopted 2002, Amended through July 15, 2003

The *City of Hayward General Plan* was updated in 2002. No significant changes to land use patterns are proposed as part of the *General Plan*. The *General Plan* designates land uses in the vicinity of airport as commercial uses, medium and high-density residential, hotel, commercial, and office uses within the Airport planning district.

The *City of Hayward General Plan* states the following airport land use compatibility related policies:

Guidelines for the Review of New Development:

A.1 Indoor noise level shall not exceed an Ldn of 45 dB in new housing units.

A.3 If the primary noise source is aircraft or a railroad, noise levels in new residential development exposed to an exterior Ldn of 60 dB or greater should be limited to a maximum instantaneous noise level in bedrooms at night of 50 dB(A). Maximum instantaneous noise levels in bedrooms during the daytime and in other rooms should not exceed 55 dB(A).

C. Locate noise-sensitive uses away from noise sources unless mitigation measures are included in development plans. Protect schools, hospitals, libraries, churches, convalescent homes, and other noise sensitive uses from noise levels exceeding those allowed in residential areas.

4.3.5.1 City of Hayward Noise Element Policies

The City of Hayward *General Plan Noise Element* states that "Other significant sources of noise in the community, including aircraft operations in the vicinity of the Hayward Executive Airport and at Oakland International Airport, railroad train operations along the Union Pacific Railroad lines, and the Bay Area Rapid Transit system are expected to remain essentially as they are today." Therefore, the same noise policies adopted in the 1986 City of Hayward *General Plan* continue to apply.

The 1986 City of Hayward *Noise Element* includes a number of policies that are related to aircraft and airport noise. These include the following relevant policies:

Policy: The City will seek to protect the public health, safety, and welfare against the adverse effects of excessive noise, consistent with the economic and environmental well-being of the City, and reaffirm desirability of quiet surroundings.

1. Provide educational material and assistance to the public regarding noise mitigation.

2. Maintain conformity of new development with the principles and standards for land use compatibility, noise exposure and noise mitigation contained in the Noise Element.

9. Continue to monitor the effectiveness of noise control programs at Hayward Executive Airport.

12. Encourage mitigation of noise through appropriate site planning, building orientation, interior layout and building materials.

4.3.6 Eden Area Plan, Alameda County, California, Updated March 2010

The Airport lies within the City of Oakland and is not subject to Alameda County *General Plan* policies. However, the following County policies are discussed since a portion of the unincorporated community of San Lorenzo lies within OAK's AIA. The unincorporated community of San Lorenzo is included as part of the *Eden Area Plan* prepared by Alameda County. The *Plan* is a statement of Alameda County's conservation and development policy for the Eden area. Land use designations in the vicinity of OAK in unincorporated Alameda County are predominantly suburban and low-density residential and limited neighborhood commercial along major arterials.

4.4 Existing Airport Land Uses

Existing and planned facilities at OAK are shown in Figure 4-3, which is the OAK airport layout plan (ALP). OAK is located on a 2,600-acre site approximately nine miles south of the City of Oakland's downtown area, and is in the City of Oakland's general industrial/transportation zoning district, which includes aviation-related commercial, industrial, and public uses. OAK is divided into two distinct areas: North Field and South Field.

4.4.1 North Field

OAK's North Field, which consists of two parallel runways 6,212 feet (Runway 9R/27L) and 5,454 feet (Runway 9L/27R) in length and a third crosswind runway (Runway 15/33), 3,372 feet in length, is used primarily for general aviation (GA) (i.e., non-air carrier) operations. North Field has its own Air Traffic Control Tower, and is also the location for all of OAK's fixed based operators (FBOs), including Kaiser Air and Business Jet Center, and general aviation hangars.

The approach path for Runway 15-33 consists of residential uses in the City of Alameda approximately 1.3 miles away with the San Leandro Bay in between. To the southwest of Runway 15-33 is airport property and the San Francisco Bay. Land uses west of Runway 9L-27R include a golf course and residential uses within approximately 1 mile of the runway end. East of Runway 9L-27R is another golf course and beyond that is industrial and residential land uses, located approximately 0.7 and 1.3 miles away from Runway 27R. The proximity of residential and industrial land uses to either end of Runway 9R-27L are nearly the same as that of Runway 9L-27R due to their parallel configuration.

4.4.2 South Field

OAK's South Field, which is defined as the area south of Ron Cowan Parkway, contains a single, 10,000-foot long runway (11/29), and is used primarily for air carrier passenger and cargo aircraft operations. The approach path for Runway 11-29 consists primarily of the San Francisco Bay.

South Field also includes approximately 208 acres of passenger facilities, including Terminals 1 (16 aircraft gates) and 2 (13 aircraft gates), the South Air Traffic Control Tower, and air cargo facilities (approximately 104 acres), the largest of which is the FedEx Metroplex (their west coast hub operation). North Field and South Field are connected by a single, north-to-south oriented taxiway (Taxiway B).

4.4.3 Typical Flight Procedures

The standard flight procedures as outlined by Oakland International Airport are as follows:

Runway 15-33. Aircraft departing Runway 33 must make a right, northerly turn over San Leandro Bay until reaching I-880 freeway and continue per ATC instructions. No straight or left crosswind/downwind departures are allowed. Straight in arrivals to Runway 15 are not recommended, unless required by safety or wind conditions.

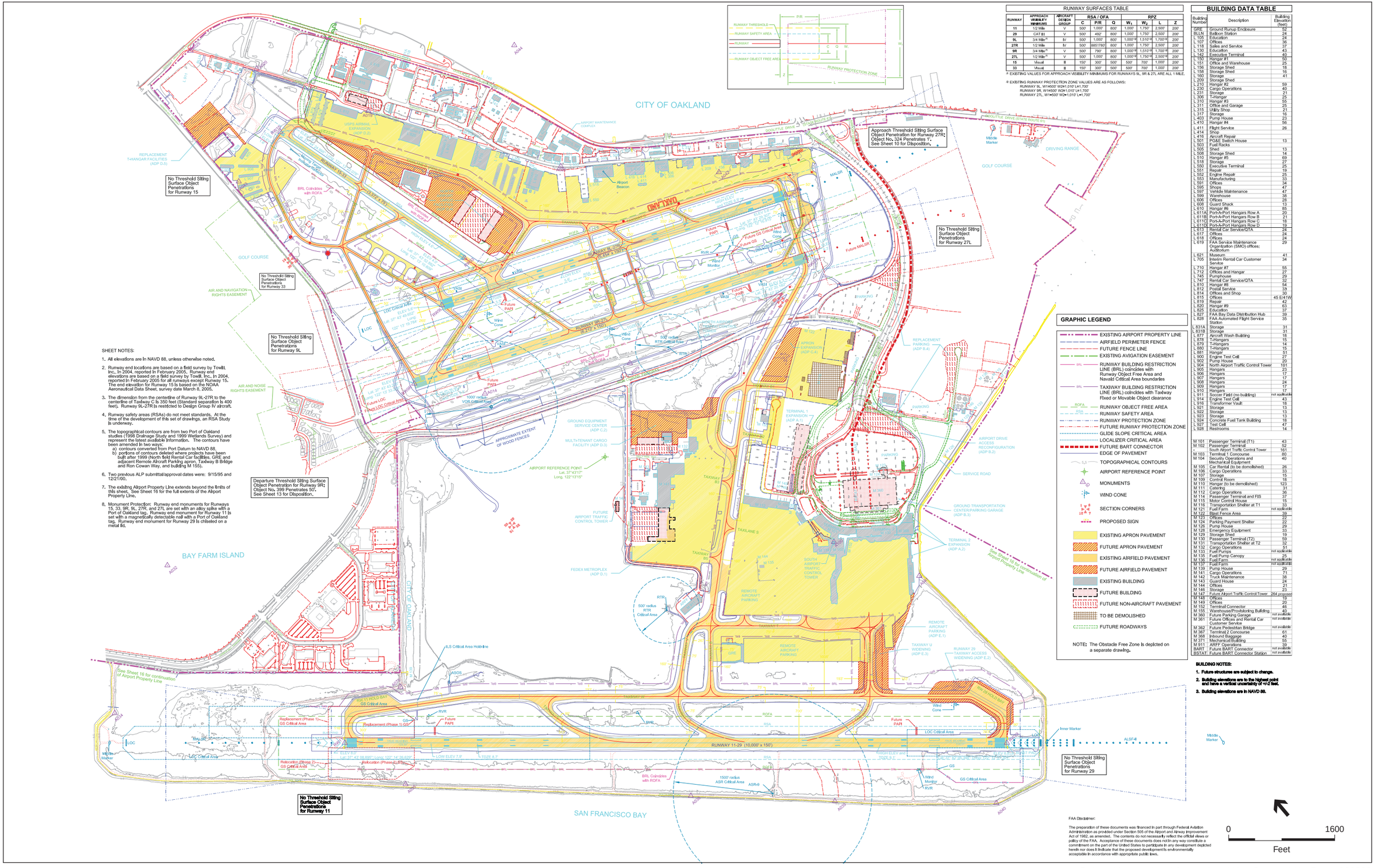
Runways 27R and 27L. Aircraft should only depart Runways 27R and 27L by making a right crosswind turn over San Leandro Bay until reaching I-880 freeway and continue per ATC instructions. Straight out departures are not recommended. At night, runway 27R is one of two preferred departure runways. Runway 27L is the preferred nighttime arrival runway.

Runways 09R and 09L. There are no daytime departure restrictions for runways 09R and 09L. At night, runway 9R is one of two preferred departure runways, no left turns are allowed from either 09R or 09L, and no straight out departures are allowed from runway 09L.

Runway 11-29. Air traffic controllers do not instruct jet aircraft over the Oakland Hills below 3,000 feet. VFR aircraft that depart Runway 29 and request a right turn are instructed to proceed at least 2 miles west or climb to at least 1,500 feet before turning right. The Quiet Runway 11 departure procedure requires that turbojets turn to the right and further out over the Bay when departing Runway 11. Air traffic controllers assign a left turn heading, or Silent7 departure procedure, to all IFR turbo-jet aircraft departing Runway 29 from 10:00 P.M. to 7:00 A.M. daily.

Oakland International Airport mandates that aircraft performing training touch-and-go procedures on the North Field use Runway 27L as the preferred runway for these procedures and fly the standard traffic pattern to avoid flying over residential areas as much as possible. Touch-and-go operations are prohibited between the hours of 10:00 p.m. and 6:00 a.m. Turbojet aircraft practicing instrument approaches south of OAK are to remain over the Bay when using Runway 29.

In addition to the procedures listed above, OAK recommends that pilots avoid overflying residential neighborhoods, gaining as much altitude as quickly as practical, and adjusting the propeller angle and engine speed to reduce engine and propeller noise.


CITY OF OAKLAND
BAY FARM ISLAND
SAN FRANCISCO BAY
RUNWAY 9L-27R (10,000' x 150')
RUNWAY 11-29 (10,000' x 150')
RUNWAY 9R-27L (9,212' x 150')
TAXIWAY C
TAXIWAY W
TAXILANE S
TERMINAL 1 EXPANSION (ADP A.1)
TERMINAL 2 EXPANSION (ADP A.2)
REMOTE AIRCRAFT PARKING
SOUTH AIRPORT TRAFFIC CONTROL TOWER
FUTURE AIRPORT TRAFFIC CONTROL TOWER
AIRPORT MAINTENANCE COMPLEX
USPS AIRMAIL EXPANSION (ADP D.2)
REPLACEMENT T-HANGAR FACILITIES (ADP D.5)
GROUND EQUIPMENT SERVICE CENTER (ADP D.2)
MULTI-TENANT CARGO FACILITY (ADP D.3)
FEDEX METROPLEX (ADP D.1)
REPLACEMENT PARKING (ADP B.4)
AIRPORT DRIVE ACCESS RECONFIGURATION (ADP B.2)
GROUND TRANSPORTATION CENTER/PARKING GARAGE (ADP B.3)
SERVICE ROAD
AIRPORT REFERENCE POINT
Lat. 37°43'17"
Long. 122°13'15"
APPROXIMATE EXTENT OF WOOD FENCES
GOLF COURSE
DRIVING RANGE
AIR AND NAVIGATION RIGHTS EASEMENT
AIR AND NOISE RIGHTS EASEMENT
No Threshold Sitting Surface Object Penetrations for Runway 15
No Threshold Sitting Surface Object Penetrations for Runway 33
No Threshold Sitting Surface Object Penetrations for Runway 9L
No Threshold Sitting Surface Object Penetrations for Runway 27L
No Threshold Sitting Surface Object Penetrations for Runway 29
No Threshold Sitting Surface Object Penetrations for Runway 11
Approach Threshold Sitting Surface Object Penetration for Runway 27R: Object No. 324 Penetrates 1'. See Sheet 10 for Disposition.
Departure Threshold Sitting Surface Object Penetration for Runway 9R: Object No. 399 Penetrates 50'. See Sheet 13 for Disposition.
See Sheet 16 for continuation of Airport Property Line
See Sheet 1 for continuation of Airport Property Line
ILS Critical Area Hold-line
1000' radius VOR Critical Area
500' radius RTR Critical Area
1500' radius ASR Critical Area
Middle Marker
Inner Marker
Wind Cone
Wind Monitor
RVR
RVR
RTR
ASOS
ASR-9
ALSF-II
MALSR
Future MALSR
Future PAPI
Future GS Critical Area
Future LOC
Future LOC Critical Area
GS Critical Area
LOC Critical Area
RSA
ROFA
RPZ
BRL Coincides with ROFA
BRL Coincides with RPZ
Runway Protection Zone
Runway Object Free Area
Runway Safety Area
Runway Safety Area (RSA)
Runway Object Free Area (ROFA)
Runway Protection Zone (RPZ)
Runway Centerline
Taxiway Centerline
Airport Property Line
Airport Beacon
Lat. 37°43'05.885"; Long. 122°14'28.822"
Relocation (Phase 1)
Relocation (Phase 2)
Replacement (Phase 1)
Replacement (Phase 2)
PARKING
SOUTH AIRPORT ROAD
AIRPORT ROADWAY
HEGENBERGER ROAD
DOOLITTLE DRIVE (STATE ROUTE 61)
MAIN WASH
WASH
A014
A015
A016
A017
A018
A019
A020
A021
A022
A023
A024
A025
A026
A027
A028
A029
A030
A031
A032
A033
A034
A035
A036
A037
A038
A039
A040
A041
A042
A043
A044
A045
A046
A047
A048
A049
A050
A051
A052
A053

4.5 Proposed Airport Facility Improvements[2]

4.5.1 Airfield

The *Oakland International Airport Master Plan* makes several recommendations for improving the airfield at OAK. In order to improve safety by minimizing the number of runway crossings required for an aircraft that lands on runway 27L, the *Master Plan* recommends constructing a new taxiway to run parallel with runway 9R-27L. The *Master Plan* also suggests adding a parallel North Field-South Field taxiway connection that would be designed to alleviate taxi times and delays. The *Master Plan* also estimates the demand for future remote (off-gate, on-Airport) remote overnight aircraft parking shall grow in the coming years, requiring an additional 23 to 46 acres of parking apron.

4.5.2 Building Area

The *Oakland International Master Plan* estimates that by the year 2025 approximately 30 million annual passengers will pass through OAK. In order to accommodate this growth, the *Master Plan* proposes that a total of 46 to 50 aircraft gates will be need to be built on the South Field, and that additional gates would require approximately 33 to 55 acres. Multiple terminal development scenarios were also proposed in the *Master Plan*, with a recommendation being made to develop future terminals on Airport property near the existing passenger facilities. According to OAK staff, the economic recession of 2008 – 2009 resulted in a significant decline in passengers and operations at OAK; therefore, additional terminal capacity may be required later than originally forecasted by the *Master Plan*.

Anticipation for the growth of air cargo operations at OAK is modest, and this is reflected in the *Master Plan*. Conservative recommendations are made for the expansion of existing FedEx facilities, south of Ron Conway Parkway and north of the existing FedEx Metroplex. Additional expansion is also considered for the existing air cargo area at South Field and the Oakland Maintenance Center site.

The *Master Plan* estimates that by 2025, and additional 14 to 29 acres of land would be required to base jets and turboprops at OAK. Projections, however, do not anticipate the need for additional land for piston aircraft and helicopters beyond 2010. Several recommendations for the development of general aviation facilities (i.e., large hangars for jets and turboprops, T-hangars for piston aircraft, and associated ramp area) are made by the *Master Plan*, with an emphasis focusing on constructing facilities in the northwest corner of the Airport, and in two areas parallel to Runway 15-33.

All development concepts proposed in the *Master Plan* occur within existing Airport boundaries. While these recommendations are made in the anticipation of future increased operations at OAK, they would not require the expansion of airport property.

[2] Airport facility improvements are described in greater detail in the *Oakland International Airport Master Plan.*

4.6 Airport Planning Documents

4.6.1 Oakland International Airport Master Plan

The *Oakland International Airport Master Plan* was adopted by the Port of Oakland's Board of Port Commissioners in March 2006. The plan includes an inventory of existing facilities and activity at the airport, forecasts of future airport activity, a projection of aviation facility needs, a presentation of development alternatives, a financial plan, and environmental considerations.

4.7 Existing and Future Airport Activity

The *Oakland International Airport Master Plan* has a 20-year forecasting horizon (2005 – 2025), but for the purpose of development recommendations, much of the analysis in the Master Plan is "near-term" (2010 and 2012).

4.7.1 Fleet Mix

Approximately 175 general aviation aircraft park in hangars at the North Field, and approximately 102 general aviation aircraft tie-down on the North Field ramps. The Master Plan offers an "unconstrained" forecast of future number of the based fleet mix at North Field, leaving out any assumptions in regards to the availability of existing and/or future facilities (see Table 4-1).

TABLE 4-1
EXISTING AND FORECAST BASED GENERAL AVIATION FLEET MIX

	Existing (2004)	2010	2025
General Aviation Aircraft Type			
Helicopter	6	14	14
Jet	29	36	58
Piston	228	320	320
Turboprop	14	14	14
Total	277	384	406

Source: *Oakland International Airport Master Plan*, 2006.

4.7.2 Operations

In terms of General Aviation activity, the OAK Master Plan projects that piston aircraft operations will decrease by one percent each year, while jet and helicopter operations are expected to increase in the near term due to the opening of a helicopter school, and then level off. The number of turboprop operations is not expected to change over the planning horizon (see Table 4-2).

TABLE 4-2
PROJECTED OPERATIONS BY AIRCRAFT TYPE

	2004 Operations	2010 Operations
General Aviation Aircraft Type		
Helicopter	2,704	35,507
Jet	16,574	19,937
Piston	103,542	97,238
Turboprop	5,822	5,822
Total	128,642	158,504

Source: *Oakland International Airport Master Plan*, 2006.

Table 4-3 presents forecasted airline passenger and air cargo activity.

TABLE 4-3
AIRLINE PASSENGER AND AIR CARGO FORECASTED OPERATIONS

	2004 Operations	2010 Operations
Airline Passengers		
Million Airline Passengers	14.1	18
Planning Day Passengers (Average Day, Peak Month)	43,745	56,047
Daily Operations	430	542
Percent of Daily Total Operations	45.8%	47.5%
Air Cargo		
Million Annual Tons	0.74	0.9
Daily Operations	156	164
Percent of Total Daily Operations	16.6%	14.4%

Source: *Oakland International Airport Master Plan*, 2006.

This page left intentionally blank.

CHAPTER 5
References

California Building Standards Commission, *2001 California Building Code*, California Code of Regulations, Title 24, effective November 2002.

California Department of Transportation, Division of Aeronautics, *California Airport Land Use Planning Handbook*, January 2002.

California Department of Transportation, *California Airport Land Use Commission Laws*, Public Utility Code 21670, February 2007.

City of Alameda, *City of Alameda General Plan*, adopted 1991.

City of Hayward, *City of Hayward General Plan*, adopted July 2002.

City of Oakland, *City of Oakland General Plan, Land Use and Transportation Element*, adopted March 1998.

City of San Leandro, *City of San Leandro General Plan*, adopted 2002.

County of Alameda, *Unincorporated Eden Area Plan*, adopted November 1983.

FAA, Advisory Circular (AC) 150/5390 – 2B, *Heliport Design*, September 30, 2004.

FAA, Federal Aviation Regulation (FAR) Part 77: *Objects Affecting Navigable Airspace*, 2007.

Horvath, C. October 31, 2006. Personal communication (email) from Alameda County regarding heliport locations transmitted to L. Harmon, ESA. Sacramento, California.

Mead & Hunt, *Borrego Valley Airport Land Use Compatibility Plan*, December 2006.

This page left intentionally blank.

Appendices

Appendix A

California Airport Land Use Commission Laws Public Utility Code Section 21670

APPENDIX A

California Airport Land Use Commission Laws Public Utility Code Section 21670

A.1 Creation; Membership; Selection

21670

(a) The Legislature hereby finds and declares that:

(1) It is in the public interest to provide for the orderly development of each public use airport in this state and the area surrounding these airports so as to promote the overall goals and objectives of the California airport noise standards adopted pursuant to Section 21669 and to prevent the creation of new noise and safety problems.

(2) It is the purpose of this article to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.

(b) In order to achieve the purposes of this article, every county in which there is located an airport which is served by a scheduled airline shall establish an airport land use commission. Every county, in which there is located an airport which is not served by a scheduled airline, but is operated for the benefit of the general public, shall establish an airport land use commission, except that the board of supervisors of the county may, after consultation with the appropriate airport operators and affected local entities and after a public hearing, adopt a resolution finding that there are no noise, public safety, or land use issues affecting any airport in the county which require the creation of a commission and declaring the county exempt from that requirement. The board shall, in this event, transmit a copy of the resolution to the Director of Transportation. For purposes of this section, "commission" means an airport land use commission. Each commission shall consist of seven members to be selected as follows:

(1) Two representing the cities in the county, appointed by a city selection committee comprised of the mayors of all the cities within that county, except that if there are any cities contiguous or adjacent to the qualifying airport, at least one representative shall be appointed there from. If there are no cities within a county, the number of representatives provided for by paragraphs (2) and (3) shall each be increased by one.

(2) Two representing the county, appointed by the board of supervisors.

(3) Two having expertise in aviation, appointed by a selection committee comprised of the managers of all of the public airports within that county.

(4) One representing the general public, appointed by the other six members of the commission.

(c) Public officers, whether elected or appointed, may be appointed and serve as members of the commission during their terms of public office.

(d) Each member shall promptly appoint a single proxy to represent him or her in commission affairs and to vote on all matters when the member is not in attendance. The proxy shall be designated in a signed written instrument which shall be kept on file at the commission offices, and the proxy shall serve at the pleasure of the appointing member. A vacancy in the office of proxy shall be filled promptly by appointment of a new proxy.

(e) A person having an "expertise in aviation" means a person who, by way of education, training, business, experience, vocation, or avocation has acquired and possesses particular knowledge of, and familiarity with, the function, operation, and role of airports, or is an elected official of a local agency which owns or operates an airport.

(f) It is the intent of the Legislature to clarify that, for the purposes of this article, special districts, school districts, and community college districts are included among the local agencies that are subject to airport land use laws and other requirements of this article.

A.2 Action by Designated Body Instead of Commission

21670.1

(a) Notwithstanding any other provision of this article, if the board of supervisors and the city selection committee of mayors in the county each makes a determination by a majority vote that proper land use planning can be accomplished through the actions of an appropriately designated body, then the body so designated shall assume the planning responsibilities of an airport land use commission as provided for in this article, and a commission need not be formed in that county.

(b) A body designated pursuant to subdivision (a) which does not include among its membership at least two members having an expertise in aviation, as defined in subdivision (e) of Section 21670, shall, when acting in the capacity of an airport land use commission, be augmented so that that body, as augmented, will have at least two members having that expertise. The commission shall be constituted pursuant to this section on and after March 1, 1988.

(c) (1) Notwithstanding subdivisions (a) and (b), and subdivision (b) of Section 21670, if the board of supervisors of a county and each affected city in that county each makes a determination that proper land use planning pursuant to this article can be accomplished pursuant to this subdivision, then a commission need not be formed in that county.

(2) If the board of supervisors of a county and each affected city makes a determination that proper land use planning may be accomplished and a commission is not formed pursuant to paragraph (1) of this subdivision, that county and the appropriate affected cities having jurisdiction over an airport, subject to the review and approval by the Division of Aeronautics of the department, shall do all of the following:

(A) Adopt processes for the preparation, adoption, and amendment of the comprehensive airport land use plan for each airport that is served by a scheduled airline or operated for the benefit of the general public.

(B) Adopt processes for the notification of the general public, landowners, interested groups, and other public agencies regarding the preparation, adoption, and amendment of the comprehensive airport land use plans.

(C) Adopt processes for the mediation of disputes arising from the preparation, adoption, and amendment of the comprehensive airport land use plans.

(D) Adopt processes for the amendment of general and specific plans to be consistent with the comprehensive airport land use plans.

(E) Designate the agency that shall be responsible of the preparation, adoption, and amendment of each comprehensive airport land use plan.

(3) The Division of Aeronautics of the department shall review the processes adopted pursuant to paragraph (2), and shall approve the processes if the division determines that the processes are consistent with the procedure required by this article and will do all of the following:

(A) Result in the preparation, adoption, and implementation of plans within a reasonable amount of time.

(B) Rely on the height, use, noise, safety, and density criteria that are compatible with airport operations, as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations.

(C) Provide adequate opportunities for notice to, review of, and comment by the general public, landowners, interested groups, and other public agencies.

(4) If the county does not comply with the requirements of paragraph (2) within 120 days, then the plan and amendments shall not be considered adopted pursuant to this article and a commission shall be established within 90 days of the determination of noncompliance by the division and a plan shall be adopted pursuant to this article within 90 days of the establishment of the commission.

(d) A commission need not be formed in a county that has contracted for the preparation of comprehensive airport land use plans with the Division of Aeronautics under the California Aids to Airport Program (Title 21 (commencing with Section 4050) of the California Code of Regulations), Project Ker-VAR 90-1, and that submits all of the following information to the Division of Aeronautics for review and comment that the county and the cities affected by the airports within the county, as defined by the plans:

(1) Agree to adopt and implement the comprehensive airport plans that have been developed under contract.

(2) Incorporated the height, use, noise, safety, and density criteria that are compatible with airport operations as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal

aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations as part of the general and specific plans for the county and for each affected city.

(3) If the county does not comply with this subdivision on or before May 1, 1995, then a commission shall be established in accordance with this article.

(e) (1) A commission need not be formed in a county if all of the following conditions are met:

(A) The county has only one public use airport that is owned by a city.

(B) (i) The county and the affected city adopt the elements in paragraph (2) of subdivision (d), as part of their general and specific plans for the county and the affected city.

(ii) The general and specific plans shall be submitted, upon adoption, to the Division of Aeronautics. If the county and the affected city do not submit the elements specified in paragraph (2) of subdivision (d), on or before May 1, 1996, then a commission shall be established in accordance with this article.

A.3 Application to Counties Having Over 4 Million Population

21670.2

(a) Sections 21670 and 21670.1 do not apply to the County of Los Angeles. In that county, the county regional planning commission has the responsibility for coordinating the airport planning of public agencies within the county. In instances where impasses result relative to this planning, an appeal may be made to the county regional planning commission by any public agency involved. The action taken by the county regional planning commission on such an appeal may be overruled by a four-fifths vote of the governing body of a public agency whose planning led to the appeal.

(b) By January 1, 1992, the county regional planning commission shall adopt the comprehensive land use plans required pursuant to Section 21675.

(c) Sections 21675.1, 21675.2, and 21679.5 do not apply to the County of Los Angeles until January 1, 1992. If the comprehensive land use plans required pursuant to Section 21675 are not adopted by the county regional planning commission by January 1, 1992, Sections 21675.1 and 21675.2 shall apply to the County of Los Angeles until the plans are adopted.

21670.3

(a) Sections 21670 and 21670.1 do not apply to the County of San Diego. In that county, San Diego County Regional Airport Authority, as established pursuant to Section 170002, is responsible for coordinating the airport planning of public agencies within the county and shall, on or before June 30, 2005, after reviewing the existing airport land use compatibility plan adopted pursuant to Section 21675, adopt an airport land use compatibility plan.

(b) Any airport land use compatibility plan developed pursuant to Section 21675 and adopted pursuant to Section 21675.1 by the San Diego Association of Governments shall remain in effect until June 30, 2005, unless the San Diego County Regional Airport Authority adopts a plan prior to that date pursuant to subdivision (a).

A.4 Intercounty Airports

21670.4

(a) As used in this section, "intercounty airport" means any airport bisected by a county line through its runways, runway protection zones, inner safety zones, inner turning zones, outer safety zones, or sideline safety zones, as defined by the department' s Airport Land Use Plan handbook and referenced in the comprehensive land use plan formulated under Section 21675.

(b) It is the purpose of this section to provide the opportunity to establish a separate airport land use commission so that an intercounty airport may be served by a single airport land use planning agency, rather than having to look separately to the airport land use commissions of the affected counties.

(c) In addition to the airport land use commissions created under Section 21670 or the alternatives established under Section 21670.1, for their respective counties, the boards of supervisors and city selection committees for the affected counties, by independent majority vote of each county's two delegations, for any intercounty airport, may do either of the following:

(1) Establish a single separate airport land use commission for that airport. That commission shall consist of seven members to be selected as follows:

(A) One representing the cities in each of the counties, appointed by that county's city selection committee.

(B) One representing each of the counties, appointed by the board of supervisors of each county.

(C) One from each county having expertise in aviation, appointed by a selection committee comprised of the managers of all the public airports within that county.

(D) One representing the general public, appointed by the other six members of the commission.

(2) In accordance with subdivision (a) or (b) of Section 21670.1, designate an existing appropriate entity as that airport's land use commission.

A.5 Airport Owned by a City, District, or County

21671

In any county where there is an airport operated for the general public which is owned by a city or district in another county or by another county, one of the representatives provided by paragraph (1) of subdivision (b) of Section 21670 shall be appointed by the city selection

committee of mayors of the cities of the county in which the owner of that airport is located, and one of the representatives provided by paragraph (2) of subdivision (b) of Section 21670 shall be appointed by the board of supervisors of the county in which the owner of that airport is located.

A.6 Term of Office

21671.5

(a) Except for the terms of office of the members of the first commission, the term of office of each member shall be four years and until the appointment and qualification of his or her successor. The members of the first commission shall classify themselves by lot so that the term of office of one member is one year, of two members is two years, of two members is three years, and of two members is four years. The body which originally appointed a member whose term has expired shall appoint his or her successor for a full term of four years. Any member may be removed at any time and without cause by the body appointing that member. The expiration date of the term of office of each member shall be the first Monday in May in the year in which that member's term is to expire. Any vacancy in the membership of the commission shall be filled for the unexpired term by appointment by the body which originally appointed the member whose office has become vacant. The chairperson of the commission shall be selected by the members thereof.

(b) Compensation, if any, shall be determined by the board of supervisors.

(c) Staff assistance, including the mailing of notices and the keeping of minutes and necessary quarters, equipment, and supplies shall be provided by the county. The usual and necessary operating expenses of the commission shall be a county charge.

(d) Notwithstanding any other provisions of this article, the commission shall not employ any personnel either as employees or independent contractors without the prior approval of the board of supervisors.

(e) The commission shall meet at the call of the commission chairperson or at the request of the majority of the commission members. A majority of the commission members shall constitute a quorum for the transaction of business. No action shall be taken by the commission except by the recorded vote of a majority of the full membership.

(f) The commission may establish a schedule of fees necessary to comply with this article. Those fees shall be charged to the proponents of actions, regulations, or permits, shall not exceed the estimated reasonable cost of providing the service, and shall be imposed pursuant to Section 66016 of the Government Code. Except as provided in subdivision (g), after June 30, 1991, a commission which has not adopted the comprehensive land use plan required by Section 21675 shall not charge fees pursuant to this subdivision until the commission adopts the plan.

(g) In any county which has undertaken by contract or otherwise completed land use plans for at least one-half of all public use airports in the county, the commission may continue to charge fees necessary to comply with this article until June 30, 1992, and, if the land use plans are complete by that date, may continue charging fees after June 30, 1992. If the land use plans are not complete by June 30, 1992, the commission shall not charge fees pursuant to subdivision (f) until the commission adopts the land use plans.

A.7 Rules and Regulations

21672

Each commission shall adopt rules and regulations with respect to the temporary disqualification of its members from participating in the review or adoption of a proposal because of conflict of interest and with respect to appointment of substitute members in such cases.

A.8 Initiation of Proceedings for Creation by Owner of Airport

21673

In any county not having a commission or a body designated to carry out the responsibilities of a commission, any owner of a public airport may initiate proceedings for the creation of a commission by presenting a request to the board of supervisors that a commission be created and showing the need therefore to the satisfaction of the board of supervisors.

A.9 Powers and Duties

21674

The commission has the following powers and duties, subject to the limitations upon its jurisdiction set forth in Section 21676:

(a) To assist local agencies in ensuring compatible land uses in the vicinity of all new airports and in the vicinity of existing airports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses.

(b) To coordinate planning at the state, regional, and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare.

(c) To prepare and adopt an airport land use plan pursuant to Section 21675.

(d) To review the plans, regulations, and other actions of local agencies and airport operators pursuant to Section 21676.

(e) The powers of the commission shall in no way be construed to give the commission jurisdiction over the operation of any airport.

(f) In order to carry out its responsibilities, the commission may adopt rules and regulations consistent with this article.

A.10 Training of Airport Land Use Commission Staff

21674.5

(a) The Department of Transportation shall develop and implement a program or programs to assist in the training and development of the staff of airport land use commissions, after consulting with airport land use commissions, cities, counties, and other appropriate public entities.

(b) The training and development program or programs are intended to assist the staff of airport land use commissions in addressing high priority needs, and may include, but need not be limited to, the following:

(1) The establishment of a process for the development and adoption of comprehensive land use plans.

(2) The development of criteria for determining the airport influence area.

(3) The identification of essential elements which should be included in the comprehensive plans.

(4) Appropriate criteria and procedures for reviewing proposed developments and determining whether proposed developments are compatible with the airport use.

(5) Any other organizational, operational, procedural, or technical responsibilities and functions which the department determines to be appropriate to provide to commission staff and for which it determines there is a need for staff training or development.

(c) The department may provide training and development programs for airport land use commission staff pursuant to this section by any means it deems appropriate. Those programs may be presented in any of the following ways:

(1) By offering formal courses or training programs.

(2) By sponsoring or assisting in the organization and sponsorship of conferences, seminars, or other similar events.

(3) By producing and making available written information.

(4) Any other feasible method of providing information and assisting in the training and development of airport land use commission staff.

A.11 Airport Land Use Planning Handbook

21674.7

(a) An airport land use commission that formulates, adopts or amends a comprehensive airport land use plan shall be guided by information prepared and updated pursuant to Section 21674.5 and referred to as the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation.

(b) It is the intent of the Legislature to discourage incompatible land uses near existing airports. Therefore, prior to granting permits for the renovation or remodeling of existing building, building, structure, or facility, and before the construction of a new building, it is the intent of the Legislature that local agencies shall be guided by the height, use, noise, safety, and density criteria that are compatible with airport operations, as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations, to the extent that the criteria has been incorporated into the plan prepared by a commission pursuant to Section 21675. This subdivision does not limit the jurisdiction of a commission as established by this article. This subdivision does not limit the authority of local agencies to overrule commission actions or recommendations pursuant to Sections 21676, 21676.5, or 21677.

A.12 Land Use Plan

21675

(a) Each commission shall formulate a comprehensive land use plan that will provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the commission, and will safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. The commission plan shall include and shall be based on a long-range master plan or an airport layout plan, as determined by the Division of Aeronautics of the Department of Transportation, that reflects the anticipated growth of the airport during at least the next 20 years. In formulating a land use plan, the commission may develop height restrictions on buildings, specify use of land, and determine building standards, including soundproofing adjacent to airports, within the planning area. The comprehensive land use plan shall be reviewed as often as necessary in order to accomplish its purposes, but shall not be amended more than once in any calendar year.

(b) The commission shall include, within its airport land use compatibility plan formulated pursuant to subdivision (a), the area within the jurisdiction of the commission surrounding any military airport for all of the purposes specified in subdivision (a). The airport land use compatibility plan shall be consistent with the safety and noise standards in the Air Installation Compatible Use Zone prepared for that military airport. This subdivision does not give the commission any jurisdiction or authority over the territory or operations of any military airport.

(c) The airport influence area shall be established by the commission after hearing and consultation with the involved agencies.

(d) The commission shall submit to the Division of Aeronautics of the department one copy of the land use compatibility plan and each amendment to the plan.

(e) If an airport land use compatibility plan does not include the matters required to be included pursuant to this article, the Division of Aeronautics of the department shall notify the commission responsible for the plan.

A.13 Adoption of Land Use Plan

21675.1

(a) By June 30, 1991, each commission shall adopt the airport land use compatibility plan required pursuant to Section 21675, except that any county that has undertaken by contract or otherwise completed land use compatibility plans for at least one-half of all public use airports in the county, shall adopt that plan on or before June 30, 1992.

(b) Until a commission adopts an airport land use compatibility plan, a city or county shall first submit all actions, regulations, and permits within the vicinity of a public airport to the commission for review and approval. Before the commission approves or disapproves any actions, regulations, or permits, the commission shall give public notice in the same manner as the city or county is required to give for those actions, regulations, or permits. As used in this section, "vicinity" means land which will be included or reasonably could be included within the airport land use compatibility plan. If the commission has not designated an airport influence area for the airport land use compatibility plan, then "vicinity" means land within two miles of the boundary of a public airport.

(c) The commission may approve an action, regulation, or permit if it finds, based on substantial evidence in the record, all of the following:

(1) The commission is making substantial progress toward the completion of the plan.

(2) There is a reasonable probability that the action, regulation, or permit will be consistent with the plan being prepared by the commission.

(3) There is little or no probability of substantial detriment to or interference with the future adopted plan if the action, regulation, or permit is ultimately inconsistent with the airport land use compatibility plan.

(d) If the commission disapproves an action, regulation, or permit, the commission shall notify the city or county. The city or county may overrule the commission, by a two-thirds vote of its governing body, if it makes specific findings that the proposed action, regulation, or permit is consistent with the purposes of this article, as stated in Section 21670.

(e) If a city or county overrules the commission pursuant to subdivision (d), that action shall not relieve the city or county from further compliance with this article after the commission adopts the airport land use compatibility plan.

(f) If a city or county overrules the commission pursuant to subdivision (d) with respect to a publicly owned airport that the city or county does not operate, the operator of the airport is not liable for damages to property or personal injury resulting from the city's or county's decision to proceed with the action, regulation, or permit.

(g) A commission may adopt rules and regulations which exempt any ministerial permit for single-family dwellings from the requirements of subdivision (b) if it makes the findings required pursuant to subdivision (c) for the proposed rules and regulations, except that the rules and regulations may not exempt either of the following:

(1) More than two single-family dwellings by the same applicant within a subdivision prior to June 30, 1991.

(2) Single-family dwellings in a subdivision where 25 percent or more of the parcels are undeveloped.

A.14 Approval or Disapproval of Actions, Regulations, or Permits

21675.2

(a) If a commission fails to act to approve or disapprove any actions, regulations, or permits within 60 days of receiving the request pursuant to Section 21675.1, the applicant or his or her representative may file an action pursuant to Section 1094.5 of the Code of Civil Procedure to compel the commission to act, and the court shall give the proceedings preference over all other actions or proceedings, except previously filed pending matters of the same character.

(b) The action, regulation, or permit shall be deemed approved only if the public notice required by this subdivision has occurred. If the applicant has provided seven days advance notice to the commission of the intent to provide public notice pursuant to this subdivision, then, not earlier than the date of the expiration of the time limit established by Section 21675.1, an applicant may provide the required public notice. If the applicant chooses to provide public notice, that notice shall include a description of the proposed action, regulation, or permit substantially similar to the descriptions which are commonly used in public notices by the commission, the location of any proposed development, the application number, the name and address of the commission, and a statement that the action, regulation, or permit shall be deemed approved if the commission has not acted within 60 days. If the applicant has provided the public notice specified in this subdivision, the time limit for action by the commission shall be extended to 60 days after the public notice is provided. If the applicant provides notice pursuant to this section, the commission shall refund to the applicant any fees which were collected for providing notice and which were not used for that purpose.

(c) Failure of an applicant to submit complete or adequate information pursuant to Sections 65943 to 65946, inclusive, of the Government Code, may constitute grounds for disapproval of actions, regulations, or permits.

(d) Nothing in this section diminishes the commission's legal responsibility to provide, where applicable, public notice and hearing before acting on an action, regulation, or permit.

A.15 Review of Local General Plans

21676

(a) Each local agency whose general plan includes areas covered by an airport land use compatibility plan shall, by July 1, 1983, submit a copy of its plan or specific plans to the airport land use commission. The commission shall determine by August 31, 1983, whether the plan or plans are consistent or inconsistent with the airport land use compatibility plan. If the plan or plans are inconsistent with the airports land use compatibility plan, the local agency shall be notified and that local agency shall have another hearing to reconsider its airport land use compatibility plans. The local agency may propose to overrule the commission after such hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decisions and findings. The commission and the

division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the final record of any final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

(b) Prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission pursuant to Section 21675, the local agency shall first refer the proposed action to the commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The local agency may, after a public hearing, overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decisions and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the final record of any final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

(c) Each public agency owning any airport within the boundaries of an airport land use compatibility plan shall, prior to modification of its airport master plan, refer such proposed change to the airport land use commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The public agency may, after a public hearing, overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decisions and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the final record of any final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

(d) Each commission determination pursuant to subdivision (b) or (c) shall be made within 60 days from the date of referral of the proposed action. If a commission fails to make the determination within that period, the proposed action shall be deemed consistent with the airport land use compatibility plan.

A.16 Review of Local Plans

21676.5

(a) If the commission finds that a local agency has not revised its general plan or specific plan or overruled the commission by a two-thirds vote of its governing body after making specific findings that the proposed action is consistent with the purposes of this article as stated in Section 21670, the commission may require that the local agency submit all subsequent actions, regulations, and permits to the commission for review until its general plan or specific plan is revised or the specific findings are made. If, in the determination of the commission, an action, regulation, or permit of the local agency is inconsistent with the airport land use compatibility plan, the local agency shall be notified and that local agency shall hold a hearing to reconsider its plan. The local agency may propose to overrule the commission after the hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article as stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decisions and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the final record of any final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

(b) Whenever the local agency has revised its general plan or specific plan or has overruled the commission pursuant to subdivision (a), the proposed action of the local agency shall not be subject to further commission review, unless the commission and the local agency agree that individual projects shall be reviewed by the commission.

A.17 Marin County Override Provisions

21677

Notwithstanding Section 21676, any public agency in the County of Marin may overrule the Marin County Airport Land Use Commission by a majority vote of its governing body. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decisions and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the final record of any final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

A.18 Airport Owner's Immunity

21678

With respect to a publicly owned airport that a public agency does not operate, if the public agency pursuant to Section 21676 or 21676.5 overrides a commission's action or recommendation, the operator of the airport shall be immune from liability for damages to property or personal injury caused by or resulting directly or indirectly from the public agency's decision to override the commission's action or recommendation.

A.19 Court Review

21679

(a) In any county in which there is no airport land use commission or other body designated to assume the responsibilities of an airport land use commission, or in which the commission or other designated body has not adopted an airport land use compatibility plan, an interested party may initiate proceedings in a court of competent jurisdiction to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, which directly affects the use of land within one mile of the boundary of a public airport within the county.

(b) The court may issue an injunction which postpones the effective date of the zoning change, zoning variance, permit, or regulation until the governing body of the local agency which took the action does one of the following:

  (1) In the case of an action which is a legislative act, adopts a resolution declaring that the proposed action is consistent with the purposes of this article stated in Section 21670.

  (2) In the case of an action which is not a legislative act, adopts a resolution making findings based on substantial evidence in the record that the proposed action is consistent with the purposes of this article stated in Section 21670.

  (3) Rescinds the action.

  (4) Amends its action to make it consistent with the purposes of this article stated in Section 21670, and complies with either paragraph (1) or (2) of this subdivision, whichever is applicable.

(c) The court shall not issue an injunction pursuant to subdivision (b) if the local agency which took the action demonstrates that the general plan and any applicable specific plan of the agency accomplishes the purposes of an airport land use compatibility plan as provided in Section 21675.

(d) An action brought pursuant to subdivision (a) shall be commenced within 30 days of the decision or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever is longer.

(e) If the governing body of the local agency adopts a resolution pursuant to subdivision (b) with respect to a publicly owned airport that the local agency does not operate, the operator of the airport shall be immune from liability for damages to property or personal injury from the local agency's decision to proceed with the zoning change, zoning variance, permit, or regulation.

(f) As used in this section, "interested party" means any owner of land within two miles of the boundary of the airport or any organization with a demonstrated interest in airport safety and efficiency.

A.20 Deferral of Court Review

21679.5

(a) Until June 30, 1991, no action pursuant to Section 21679 to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, directly affecting the use of land within one mile of the boundary of a public airport, shall be commenced in any county in which the commission or other designated body has not adopted an airport land use compatibility plan, but is making substantial progress toward the completion of the airport land use compatibility plan.

(b) If a commission has been prevented from adopting the airport land use compatibility plan by June 30, 1991, or if the adopted airport land use compatibility plan could not become effective, because of a lawsuit involving the adoption of the airport land use compatibility plan, the June 30, 1991, date in subdivision (a) shall be extended by the period of time during which the lawsuit was pending in a court of competent jurisdiction.

(c) Any action pursuant to Section 21679 commenced prior to January 1, 1990, in a county in which the commission or other designated body has not adopted an airport land use compatibility plan, but is making substantial progress toward the completion of the airport land use compatibility plan, which has not proceeded to final judgment, shall be held in abeyance until June 30, 1991. If the commission or other designated body adopts an airport land use compatibility plan on or before June 30, 1991, the action shall be dismissed. If the commission or other designated body does not adopt an airport land use compatibility plan on or before June 30, 1991, the plaintiff or plaintiffs may proceed with the action.

(d) An action to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, directly affecting the use of land within one mile of the boundary of a public airport for which an airport land use compatibility plan has not been adopted by June 30, 1991, shall be commenced within 30 days of June 30, 1991, or within 30 days of the decision by the local agency, or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever date is later.

Appendix B

Airport Land Use Compatibility Concepts

ESA

APPENDIX B
Airport Land Use Compatibility Concepts

Introduction

The information provided in this appendix addresses concepts and rationale used during the development of the compatibility policies and figures presented in Chapters 2 and 3 of this CLUP. The foundation for these policies and the concepts behind them derive from the *California Airport Land Use Compatibility Handbook* (Caltrans, January 2002).

As outlined in the *Handbook* and this CLUP, the policies regarding airport land use compatibility are focused into four concepts categories:

1. **Noise** – As defined by cumulative noise exposure contours depicting noise from aircraft operations near an airport.

2. **Safety** – This addresses minimizing risks of aircraft accidents beyond the runway environment, and their potential impacts to the general public in the airport's vicinity.

3. **Airspace Protection** – This is accomplished by placing limits on the height of man-made structures and other objects in the airport vicinity, and restrictions on other uses that potentially pose hazards to flight.

4. **Overflight** – The impacts of aircraft flight over a community.

Noise

Noise is one of the most basic airport land use compatibility concerns. Moreover, at major airline airports, many busy general aviation airports, and most military airfields, noise is often the most recognized impact by the general public.

Compatibility Objective

The purpose of noise compatibility policies s to reduce the number of people exposed to frequent and/ or high levels of airport noise. This is often accomplished by avoiding the establishment of new, noise-sensitive land uses in areas that are exposed to significant levels of aircraft noise.

Measurement

For the purpose of airport land use compatibility planning, noise generated by the operation of aircraft to, from, and around an airport is primarily measured in terms of the cumulative noise levels of all aircraft operations. In California, the cumulative noise level metric established by state regulations, including for airport noise, is the Community Noise Equivalent Level (CNEL). This metric provides a single measure of the average sound level in decibels (dB) to which any point near an airport is exposed.

To reflect assumed greater community sensitivity to nighttime and evening noise, events during these periods are counted as being louder than actually measured due to the fact fewer ambient noises exist as during the daytime. Cumulative noise levels are usually illustrated on airport area maps as contour lines connecting points of equal noise exposure. Mapped noise contours primarily show areas of significant noise exposures – ones affected by high concentrations of aircraft takeoffs and landings.

Calculating cumulative noise levels requires several inputs, including the number, type, and time of day of aircraft operations, the location of flight tracks as well as other data. Airports with air traffic control towers can often provide recorded data, and in most metropolitan areas, noise monitoring and radar flight tracking data is available. An important point to be stressed is that, despite the availability of a multitude of data, the location of noise contours is not necessarily precise. In the best of situations, where extensive noise monitoring and flight track data is available, current contours can be accurate to within ±1 dB. In locations where less data is available, the level of accuracy has generally been found to be ±3 dB.

Compatibility Strategies

The basic strategy for achieving noise compatibility in the vicinity of an airport is to limit development of land uses which are particularly sensitive to noise. Given the effect that varying levels of noise can have on people (see Table B-1), the most acceptable land uses are ones which either involve few people, or generate significant noise levels themselves (such as other transportation facilities or some industrial uses).

On occasion, local considerations outweigh noise impacts and result in decisions by local land use jurisdictions or even ALUCs to allow residential development in locations where this type of use would normally be considered incompatible. In these situations, approval of development should be conditioned upon the dedication of avigation easement and requirements for sufficient acoustic insulation of structures to assure that aircraft noise is reduced to an interior noise level of 45 dB CNEL or less.

TABLE B-1
SUMMARY OF EFFECTS OF NOISE ON PEOPLE

Day-Night Average Sound Level (Decibels)	Effects[1]			
	Hearing Loss (Qualitative Description)	Annoyance[2] (Percentage of Population Highly Annoyed)[3]	Average Community Reaction[4]	General Community Attitude Toward Area
≥75	May begin to occur	37%	Very severe	Noise is likely to be the most important of all adverse aspects of the community environment.
70	Will not likely occur	22%	Severe	Noise is one of the most important adverse aspects of the community environment.
65	Will not occur	12%	Significant	Noise is one of the important adverse aspects of the community environment.
60	Will not occur	7%	Moderate to Slight	Noise may be considered an adverse aspect of the community environment.
≤55	Will not occur	3%		Noise considered no more important than various other environmental factors.

[1] All data is drawn from National Academy of Science 1977 report *Guidelines for Preparing Environmental Impact Statements on Noise*, Report of Working Group 69 on Evaluation of Environmental Impact of Noise.

[2] A summary measure of the general adverse reaction of people to living in noisy environments that cause speech interference; sleep disturbance; desire for tranquil environment; and the inability to use the telephone, radio or television satisfactorily.

[3] The percentage of people reporting annoyance to lesser extents are higher in each case. An unknown small percentage of people will report being "highly annoyed" even in the quietest surroundings. One reason is the difficulty all people have in integrating annoyance over a very long time. USAF Update with 400 points (Finegold et al. 1992)

[4] Attitudes or other non-acoustic factors can modify this. Noise at low levels can still be an important problem, particularly when it intrudes into a quiet environment.

NOTE:
Research implicates noise as a factor producing stress-related health effects such as heart disease, high blood pressure and stroke, ulcers and other digestive disorders. The relationships between noise and these effects, however, have not as yet been conclusively demonstrated. (Thompson 1981; Thompson et al. 1989; CHABA 1981; CHABA 1982; Hattis et al. 1980; and U.S. EPA 1981)

Source: Federal Interagency Committee on Noise (1992)

Source: Caltrans, *California Airport Land Use Planning Handbook*, January 2002.

Basis for Setting Criteria

Compatibility criteria related to cumulative noise levels are well-established in federal and state laws and regulations. The basic state criterion sets a CNEL of 65 dB as the maximum noise level normally compatible with urban residential land uses, though local jurisdictions can institute a lower maximum CNEL for residential land uses. A process called "normalization" is one means of adjusting the criteria to reflect ambient sound levels, the community's previous exposure to noise, and any other local characteristics. This process helps to determine what CNEL is of significance to that particular community. Once the baseline maximum CNEL for residential uses is established, criteria for other land uses can be set in a manner consistent with this starting point.

Safety

In comparison to noise, safety is in many respects a more difficult concern to address in airport land use compatibility policies. The primary reason for this difference is that safety policies address uncertain events which *may occur* with *occasional* aircraft operations, whereas noise policies deal with known, quantifiable, and more or less predictable events which *do occur* with *every* aircraft operation. Because aircraft accidents happen infrequently and the time, place, and consequences of their occurrence cannot be predicted, the concept of "risk" is central to the assessment of safety compatibility. From the standpoint of land use planning, two variables determine the degree of risk posed by potential aircraft accidents:

1. *Accident Frequency* – Where and when aircraft accidents occur in the vicinity of the airport; and

2. *Accident Consequences* – Land uses and land use characteristics which affect the severity of an accident when one occurs.

Compatibility Objective

The main objective of safety compatibility criteria is to simply minimize the risks associated with potential aircraft accidents. This task is made up of two components; 1) safety on the ground; and 2) safety for aircraft occupants. The fundamental objective for providing safety on the ground is to protect people and property in the event of an aircraft accident near an airport. Safety for aircraft occupants involves trying to find ways in which to enhance the chances of survival of occupants of an aircraft involved in an accident beyond the runway environment.

Measurement

Measuring the degree of safety concerns around an airport involves a determination of frequency, or in other words, assessing the potential for an accident to occur. This task includes determining two elements: *where* aircraft accidents are expected to occur, and *when* an accident might happen.

Of these two elements, the *where*, or "spatial" element is most meaningful to land use compatibility planning for a given airport. Looking at nationwide accident data, it is possible to perceive the possible location of aircraft accidents based upon the frequency of occurrence. In contrast, the *when*, or "time" element, is not very useful for land use compatibility planning due to the fact that there are too many unknowns in determining when an aircraft accident might occur.

While the historical number of aircraft accidents nationwide has varied over the years, future trends can nevertheless be predicted with a fair degree of accuracy. Even with respect to specific classes of aviation (air carrier, general aviation, and military) or types of aircraft (business jets, helicopters, etc.), the frequency of accident occurrence is fairly constant and predictable. The difficulty with prediction arises when the focus is on a single airport rather than nationwide data. The *Handbook* presents a set of diagrams indicating where accidents are most likely to occur around general aviation airports. Figure B-2 and 3 show the spatial distribution of general aviation aircraft accidents. (These charts show accident data for *all* general aviation airports. Data on accidents associated with varying runway lengths can be found in the *Handbook*, and was used for the purpose of developing safety criteria for this CLUP.)

From these two charts, several important facts are revealed:

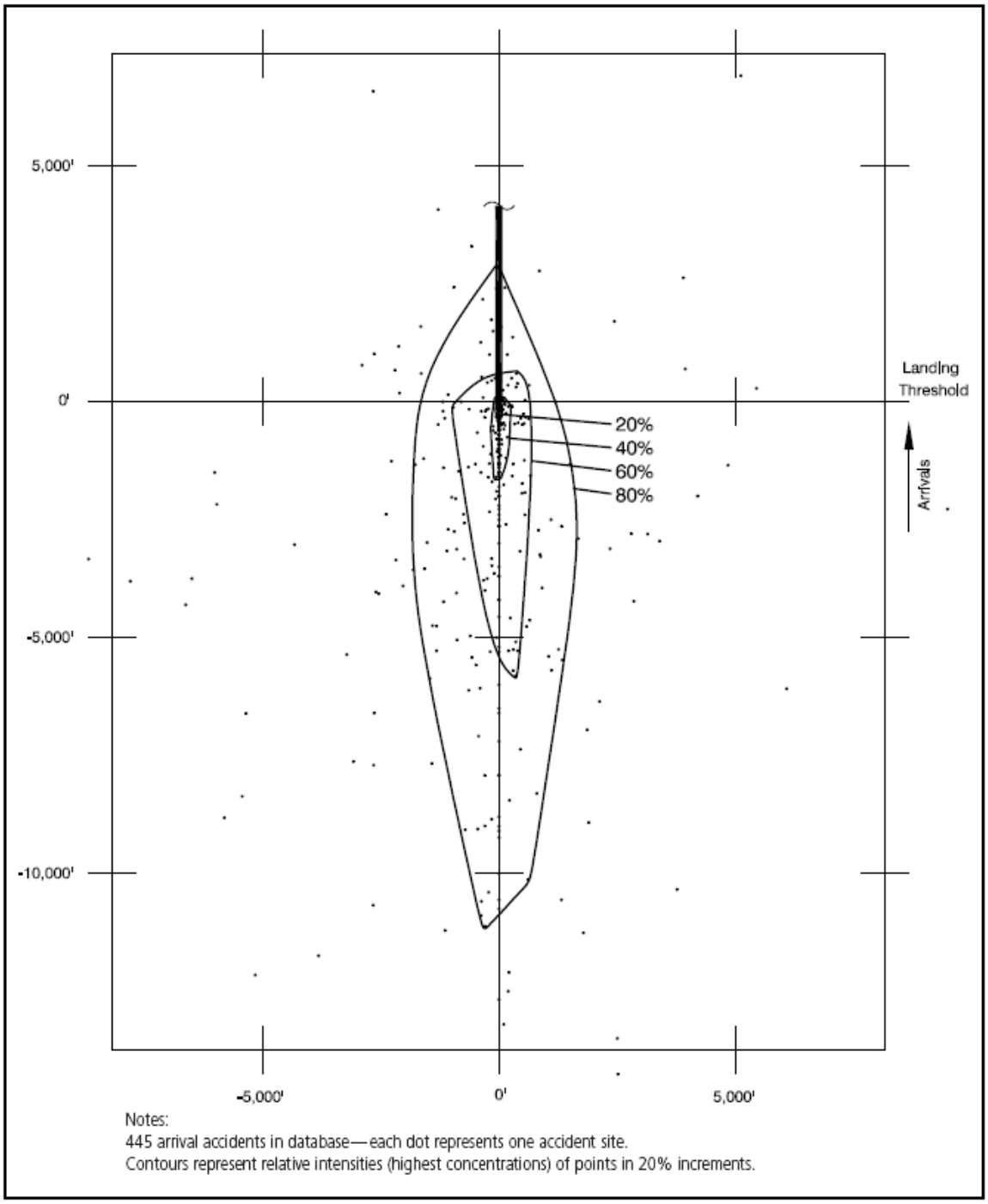
Arrival Accident Patterns

- Arrival accident sites tend to be located close to the extended runway centerline.
- Some 40% fall within a narrow strip, approximately 500-feet-wide and extending some 2,000 feet from the runway end.
- Over 80% of the arrival accident sites are concentrated within just 2,000 feet laterally from the extended runway centerline, but extending outward to approximately 11,000 feet (about 2.0 miles) of the runway end.

Departure Accident Patterns

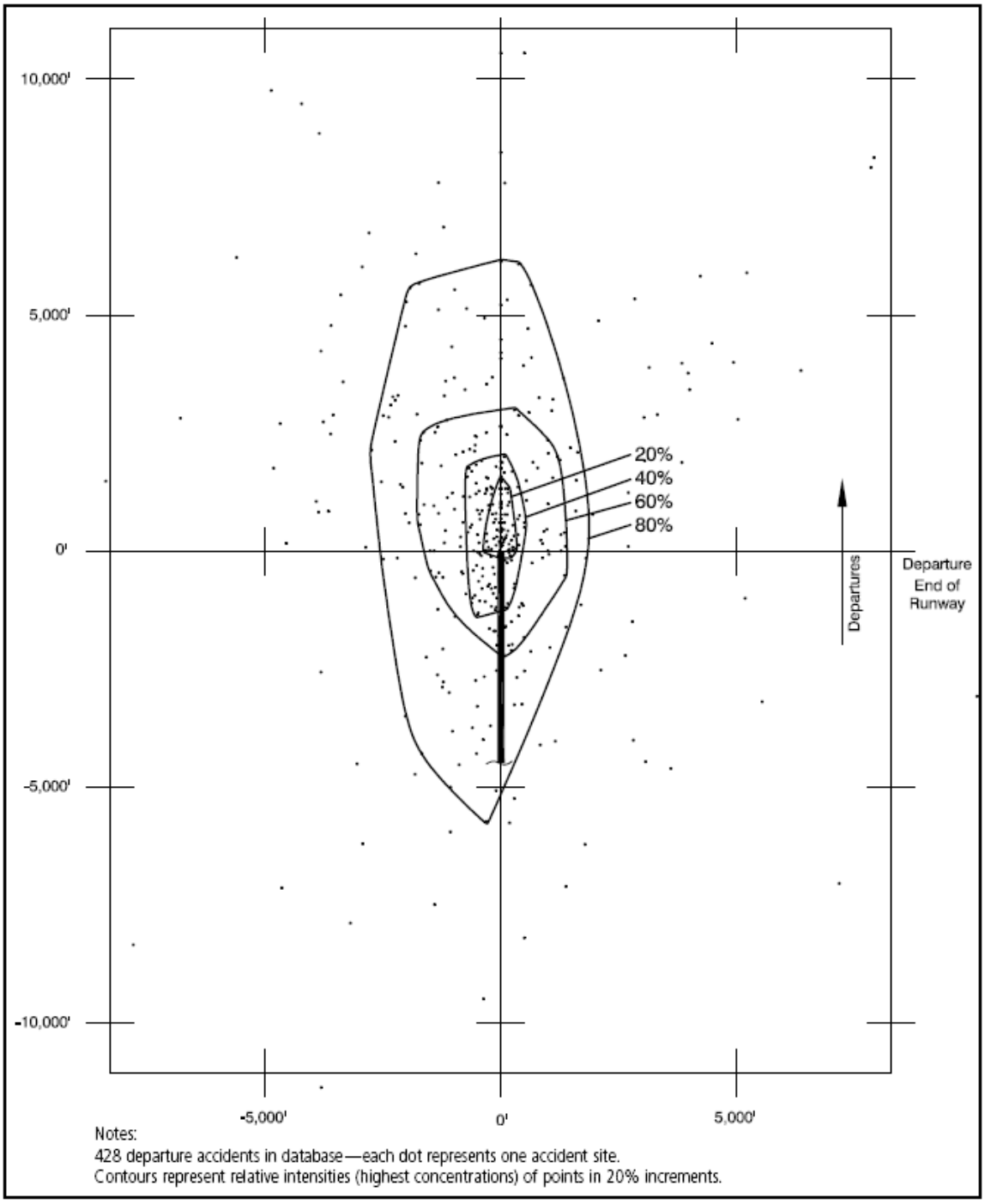
- Departure accident sites also tend to be clustered near the runway end, but are not as concentrated close to the runway centerline as are the arrival accident sites.
- The most tightly bunched 40% of the points lie within an area 1,500 feet wide, extending approximately 2,000 feet beyond the runway end, but also adjacent to the edges of the runway.
- The 80% contour extends some 6,000 feet beyond the runway end plus along the sides of the runway and spreads laterally approximately 2,000 feet from the runway centerline.

FIGURE B-2
GENERAL AVIATION ACCIDENT DISTRIBUTION CONTOURS (ALL ARRIVALS)



Source: Caltrans, *California Airport Land Use Planning Handbook*, January 2002.

FIGURE B-3
GENERAL AVIATION ACCIDENT DISTRIBUTION CONTOURS (ALL DEPARTURES)



Source: Caltrans, *California Airport Land Use Planning Handbook*, January 2002.

- Two factors account for the substantial number of departure accident sites lateral to the runway.

    1. As defined for the purposes of the database, departing aircraft which crash while attempting to return to the runway are counted as departure accidents unless the aircraft became established in the traffic pattern or on final approach; and

    2. On long runways, aircraft may begin to turn before reaching the far end of the runway.

The next step in taking the accident data provided above and making it applicable to a specific airport is the creation of safety zones. Within safety zones, it is possible for ALUCs to define safety compatibility policies. Safety zones are created to match runways of varying lengths and the approach patterns of a specific airport. The shapes of these zones reflect not just the accident distribution data, but also the ways in which different aircraft operations create various accident risk characteristics close to an airport. For most airports, the *Handbook* suggests creating six safety zones. The locations and typical dimensions of safety zones for both general aviation airports and air carrier airports are depicted in Figures B-4 and 5. In general, the level of risk associated with each safety zone is as follows:

- Zone 1 (Runway Protection Zone) – The risk is greatest in this zone. The dimensions of the RPZ are defined by FAA, which encourages airport ownership of this area and designates specific land use standards when it *is* owned by the airport. Where the land is not owned by the airport, FAA standards serve as recommendations.

- Zone 2 (Inner Approach/Departure Zones) – This zone extends beyond Zone 1, and has a significant degree of risk.

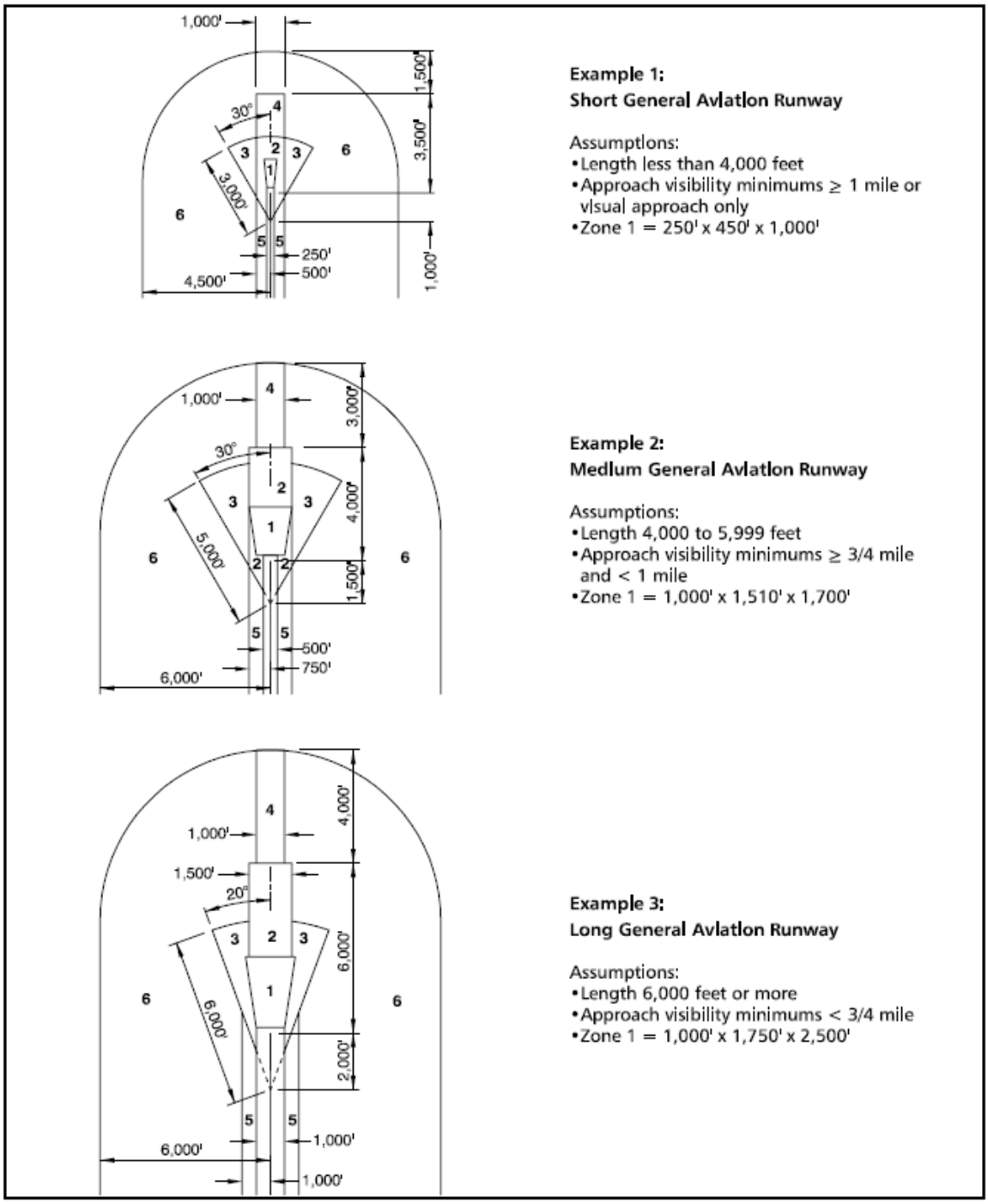
- Zone 3 (Inner Turning Zones) – The risk in this zone is less than in Zones 1 and 2, but greater than 4, 5, and 6. This area encompasses locations where aircraft typically turn at low altitudes while approaching or departing the runway.

- Zone 4 (Outer Approach/Departure Zones) – This zone extends along the runway centerline beyond Zone 2. The degree of significance of this zone depends on whether or not an airport has a straight-in instrument approach procedure.

- Zone 5 (Sideline Zone) – This zone lies adjacent to the runway, and is usually located on airport property. The risk associated with this area is similar to Zone 4.

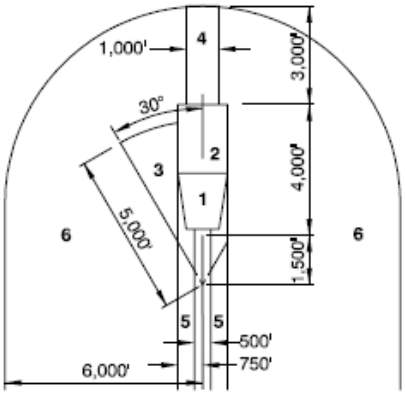
- Zone 6 (Traffic Pattern Zone) – This zone contains the aircraft traffic pattern. While a high percentage of accidents occur in this zone, the size of the zone reduces the risk level as compared to the other zones.

FIGURE B-4
SAFETY COMPATIBILITY ZONES FOR GENERAL AVIATION RUNWAYS



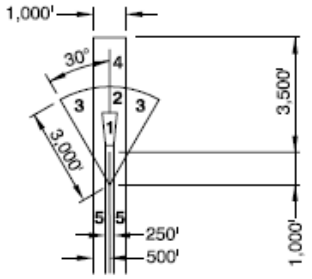
Source: Caltrans, *California Airport Land Use Planning Handbook*, January 2002.

FIGURE B-4 (CONT.)
SAFETY COMPATIBILITY ZONE EXAMPLES FOR GENERAL AVIATION RUNWAYS



Example 4:
General Aviation Runway with Single-Sided Traffic Pattern

Assumptions:
- No traffic pattern on right
- Length 4,000 to 5,999 feet
- Approach visibility minimums ≥ 3/4 mile and < 1 mile
- Zone 1 = 1,000' x 1,510' x 1,700'



Example 5:
Low-Activity General Aviation Runway

Assumptions:
- Less than 2,000 takeoffs and landings per year at individual runway end.
- Length less than 4,000 feet
- Approach visibility minimums ≥ 1 mile or visual approach only
- Zone 1 = 250' x 450' x 1,000'

Legend

1. Runway Protection Zone
2. Inner Approach/Departure Zone
3. Inner Turning Zone
4. Outer Approach/Departure Zone
5. Sideline Zone
6. Traffic Pattern Zone

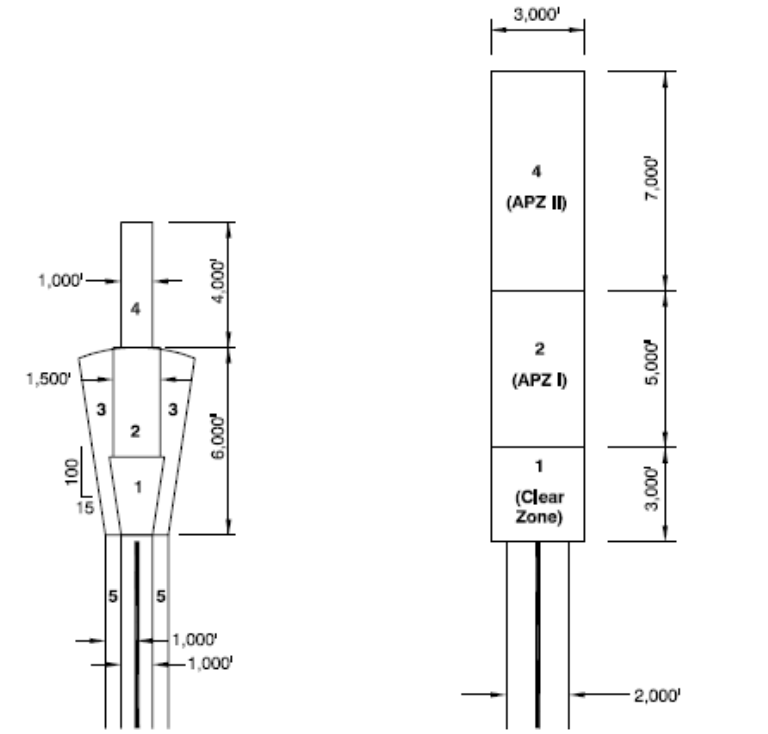
Notes:

- RPZ (Zone 1) size in each example is as indicated by FAA criteria for the approach type assumed. Adjustment may be necessary if the approach type differs.
- See Table 9A for factors to consider regarding other possible adjustments to these zones to reflect characteristics of a specific airport runway.
- See Tables 9B and 9C for guidance on compatibility criteria applicable with each zone.

These examples are intended to provide general guidance for establishment of airport safety compatibility zones. They do not represent California Department of Transportation standards or policy.

Source: Caltrans, *California Airport Land Use Planning Handbook*, January 2002.

FIGURE B-5
LARGE AIR CARRIER AND MILITARY RUNWAYS



Large Air Carrier Runway

Assumptions:
- Minimal light-aircraft general aviation activity
- Predominately straight-in and straight-out flight routes
- Approach visibility minimums < 3/4 mile
- Zone 1 = 1,000' x 1,750' x 2,500'

Military Runway for Large Aircraft

Assumptions:
- Military airport
- Predominately straight-in and straight-out flight routes (must modify for turning routes and traffic pattern activity)

Legend

1. Runway Protection Zone (Clear Zone)
2. Inner Approach/Departure Zone (Accident Potential Zone I)
3. Inner Turning Zone
4. Outer Approach/Departure Zone (Accident Potential Zone II)
5. Sideline Zone

Notes:

- RPZ (Zone 1) size in the large air carrier runway example is as indicated by FAA criteria for the approach type assumed. Adjustment may be necessary if the approach type differs.
- See Table 9A for factors to consider regarding other possible adjustments to these zones to reflect characteristics of a specific airport runway.
- See Tables 9B and 9C for guidance on compatibility criteria applicable with each zone.

These examples are intended to provide general guidance for establishment of airport safety compatibility zones. They do not represent California Department of Transportation standards or policy.

Source: Caltrans, *California Airport Land Use Planning Handbook*, January 2002.

Compatibility Strategies

Safety compatibility strategies focus on the *consequences* component of risk assessment. Essentially, the question that any ALUC or local jurisdiction should ask when making land use decisions in an airport AIA is: what land use planning measure can be taken to reduce the severity of an aircraft accident if one occurs in a particular location near an airport? Although there is a significant overlap, specific strategies must consider both components of the safety compatibility objective: protecting people and property on the ground; and enhancing safety for aircraft occupants. In each case, the primary strategy is to limit the intensity of use (the number of people concentrated on the site) in locations most susceptible to an off-airport aircraft accident. This is accomplished in several ways:

- *Density and Intensity Limitations*: Establishment of criteria limiting the maximum number of dwellings or people in areas close to the airport is the most direct method of reducing the potential severity of an aircraft accident.

- *Open Land Requirements*: Creation of requirements for open land near an airport addresses the objective of enhancing safety for the occupants of an aircraft forced to make an emergency landing away from a runway.

- *Highly Risk-Sensitive Uses*: Certain critical types of land uses – particularly schools, hospitals, and other uses in which the mobility of occupants is effectively limited – should be avoided in the vicinity of an airport regardless of the number of people involved.

Basis of Setting Criteria

Setting safety compatibility criteria presents the fundamental question of what is safe, or rather, what is an *acceptable* risk? In one respect, it may seem ideal to reduce risks to a minimum by prohibiting most types of land use development from areas near airports. However, there are usually costs associated with such high degree of restrictiveness. In practice, safety criteria are set on a progressive scale with the greatest restrictions established in locations with the greatest potential for aircraft accidents. The following resources can and should be utilized in order to develop safety criteria:

- *Established Guidance*: Little established guidance is available to ALUCs regarding how restrictive to make safety criteria for various parts of an airport's environs. Unlike noise, there are no formal federal or state laws or regulations which set safety criteria for airport area land uses for civilian airport except within runway protection zones (and with regard to airspace obstructions as described separately under *airspace protection*). FAA safety criteria primarily are focused on the runway and its immediate environment. Runway protection zones (also known as "clear areas"), were originally established mostly for the purpose of protecting the occupants of aircraft which overrun or land short of a runway.

Now, they are defined by FAA as intended to enhance the protection of people and property on the ground.

- *New Research*: To provide a better foundation for establishment of safety criteria in other portions of the airport environs, extensive research into the distribution of general aviation accident locations was conducted in conjunction with the 1993 edition of the *Handbook* and expanded as an initial step in preparation of the present edition. For this reason, the *Handbook* serves as the primary guide for the development of safety compatibility criteria. Although this document is not regulatory by nature, state law requires ALUCs to "be guided by" the information provided in the *Handbook*.

Airspace Protection

Relatively few aircraft accidents are caused by land use conditions which are hazards to flight. The potential exists, however, and protecting against it is essential to airport land use safety compatibility.

Compatibility Objective

Because airspace protection is in effect a safety factor, its object can likewise be thought of in terms of risk. Specifically, the objective is to avoid development of land use conditions which, by posing hazards to flight, can increase the risk of an accident occurring. The particular hazards of concern are:

- Airspace obstructions;
- Wildlife hazards, particularly bird strikes; and
- Land use characteristics which pose other potential hazards to flight by creating visual, unseen, or electronic interference with air navigation.

Measurement

The measurement of requirements for airspace protection around an airport is a function of several variables including: the dimensions and layout of the runway system; the type of operating procedures established for the airport; and, indirectly, the performance capabilities of aircraft operated at the airport.

- *Airspace Obstructions*: Whether a particular object constitutes an airspace obstruction depends upon the height of the object relative to the runway elevation and its proximity to the airport. The acceptable height of objects near an airport is most commonly determined by application of standards set forth in Federal Aviation Regulation Part 77: *Objects Affecting Navigable Airspace*. These regulations establish a three-dimensional

space in the air above an airport. Any object which penetrates this volume of airspace is considered to be an obstruction and may affect the aeronautical use of the airspace.

- *Wildlife and Other Hazards to Flight*: The significance of other potential hazards to flight is principally measured in terms of a hazard's specific characteristics and its distance from the airport and/ or its normal traffic patterns.

Compatibility Strategies

Compatibility strategies for the protection of airport airspace are relatively simple and are directly associated with these types of hazards:

- *Airspace Obstructions*: Buildings, antennas, other types of structures, and trees should be limited in height so as not to pose a potential hazard to flight.

- *Wildlife and Other Hazards to Flight*: Land uses which may create other types of hazards to flight near an airport should be avoided or modified so as not to include the offending characteristic. This could include, but would not be limited to land uses which create habitat for wildlife potentially hazardous to aircraft operations, industrial uses which create smoke, steam, or thermal plumes, and utility uses like electrical substations which could cause electrical interference.

Basis for Setting Criteria

The criteria for determining airspace obstructions and other hazards to flight have been long-established in FAR Part 77 and other FAA regulations and guidelines. Also, State of California regulation of obstructions under the State Aeronautics Act (Public Utilities Code, Section 21659) is based on FAR Part 77 criteria. (For further information regarding FAR Part 77, please see Appendix C.)

Overflight

Experience at many airports has shown that noise-related concerns do not stop at the boundary of the outermost mapped CNEL contour. Many people are sensitive to the frequent presence of aircraft overhead even at low noise levels. These reactions can be most accurately described in the form of annoyance.

At many airports, particularly air carrier airports, complaints often come from locations beyond any of the defined noise contours. Indeed, heavily used flight corridors to and from metropolitan areas are known to generate noise complaints 50 miles or more from the associated airport. The basis for such complaints may be a desire and expectation that outside noise sources not be intrusive – or, in some circumstances, even distinctly audible – above the quiet, natural background noise level. Elsewhere, especially in locations beneath the traffic patterns of general

aviation airports, a fear factor also contributes to some individuals' sensitivity to aircraft overflights.

While these impacts may be important community concerns, the question of importance here is whether any land use planning actions can be taken to avoid or mitigate the impacts or otherwise address the concerns. Commonly, when overflight impacts are under discussion in a community, the focus is on modification of the flight routes. Indeed, some might argue that overflight impacts should be addressed solely through the aviation side of the equation – not only flight route changes, but other modifications to where, when, and how aircraft are operated.

ALUCs are particularly limited in their ability to deal with overflight concerns. For one, they have no authority over aircraft operations. The most they can do to bring about changes is to make requests or recommendations. Even with regard to land use, the authority of ALUCs extends only to proposed new development.

Compatibility Objective

In an idealistic sense, the compatibility objective with respect to overflight is the same as for noise: avoid land use development which can lead to annoyance and complaints. However, given the extensive geographic area over which the impacts may occur, this objective is unrealistic except when relatively close to the airport. A more realistic objective therefore is to promote conditions under which annoyance will be minimized.

Measurement

Determining where to draw boundaries around areas of potentially significant overflight noise exposure is difficult because these locations extend beyond the well-defined CNEL contours which indicate areas of high noise exposure. CNEL contours are not very precise as low noise levels, especially where aircraft flight tracks are widely divergent. The general locations over which aircraft regularly fly as they approach and depart an airport is thus a better indicator of overflight annoyance concerns. For general aviation airports, such locations include areas beneath the standard airport traffic patterns, the portions of the pattern entry and departure routes flown at normal traffic pattern altitude, and perhaps additional places which experience a high concentration of overflights. Also, at all types of airports, common IFR arrival and departure routes can produce overflight concerns, sometimes many miles from the airport.

Compatibility Strategies

As noted above, the ideal land use compatibility strategy with respect to overflight annoyance is to avoid development of residential and other noise-sensitive uses in the affected locations. To the extent that this approach is not practical, three different (but not mutually exclusive) strategies are apparent.

One strategy is to help people with above-average sensitivity to aircraft overflights – people who are highly annoyed by overflights – to avoid living in locations where frequent overflights occur. This strategy involves making people more aware of an airport's proximity and its current and potential aircraft noise impacts on the community before the move to the area. This can be accomplished through buyer awareness measures such as dedication of avigation or overflight easements, recorded deed notices, and/ or real estate disclosure statements. In new residential developments, posting of signs in the real estate sales office and/ or at key locations in the subdivision itself can serve as additional means of alerting the initial purchasers about the impacts.

A second strategy is to minimize annoyance by reducing the intrusiveness of aircraft noise above normal background noise levels. Because ALUCs and local jurisdictions have no way of regulating aircraft noise levels, the other option is to promote types of residential land uses which tend to mask the intrusive noise. Particularly undesirable are "ranchette" style residential areas consisting of large (about an acre on average) lots. Such developments are dense enough to expose many people to overflight noise, yet sufficiently rural in character that background noise levels are likely to be low.

Finally, for highly noise-sensitive uses, acoustical treatment of the structures, together with dedication of an avigation easement, may be appropriate.

Basis for Setting Criteria

In California, the most definitive guidance on the location of overflight impacts or the appropriate associated action taken in response to an impact comes from a state law which went into effect January 2004. California statutes (Business and Professional Code Section 11010 and Civil Code Sections 1103 and 1353) now require most residential real estate transactions, including all involving subdivisions, to include disclosure of the property's proximity to a nearby airport. The area encompassed by the disclosure requirement is two miles from the airport, or the AIA as established by the ALUC.

Appendix C
Federal Aviation Regulations, Part 77

ESA

APPENDIX C
Federal Aviation Regulations, Part 77

Part 77 — Objects Affecting Navigable Airspace

Subpart A General

77.1 Scope.
77.2 Definition of terms.
77.3 Standards.
77.5 Kinds of objects affected.

Subpart B Notice of Construction or Alteration

77.11 Scope.
77.13 Construction or alteration requiring notice.
77.15 Construction or alteration not requiring notice.
77.17 Form and time of notice.
77.19 Acknowledgment of notice.

Subpart C Obstruction Standards

77.21 Scope.
77.23 Standards for determining obstructions.
77.25 Civil airport imaginary surfaces.
77.27 [Reserved]
77.28 Military airport imaginary surfaces.
77.29 Airport imaginary surfaces for heliports.

Subpart D Aeronautical Studies of Effect of Proposed Construction on Navigable Airspace

77.31 Scope.
77.33 Initiation of studies.
77.35 Aeronautical studies.
77.37 Discretionary review.
77.39 Effective period of determination of no hazard.

Subpart E Rules of Practice for Hearings under Subpart D

77.41 Scope.
77.43 Nature of hearing.
77.45 Presiding officer.
77.47 Legal officer.
77.49 Notice of hearing.
77.51 Parties to the hearing.
77.53 Prehearing conference.
77.55 Examination of witnesses.
77.57 Evidence.
77.59 Subpoenas of witnesses and exhibits.
77.61 Revision of construction or alteration proposal.
77.63 Record of hearing.
77.65 Recommendations by parties.
77.67 Final decision of the Administrator.
77.69 Limitations on appearance and representation.

Subpart F Establishment of Antenna Farm Areas

77.71 Scope.
77.73 General provisions.
77.75 Establishment of antenna farm areas.

Authority: 49 U.S.C. 106(g), 40103, 40113-40114, 44502, 44701, 44718, 46101-46102, 46104.
Source: Docket No. 1882, 30 FR 1839, Feb. 10, 1965, unless otherwise noted.

Subpart A — General

Sec. 77.1 Scope.

This part:

(a) Establishes standards for determining obstructions in navigable airspace;

(b) Sets forth the requirements for notice to the Administrator of certain proposed construction or alteration;

(c) Provides for aeronautical studies of obstructions to air navigation, to determine their effect on the safe and efficient use of airspace;

(d) Provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and

(e) Provides for establishing antenna farm areas.

Sec. 77.2 Definition of Terms.

For the purpose of this part:

"Airport available for public use" means an airport that is open to the general public with or without a prior request to use the airport.

"A seaplane base" is considered to be an airport only if its sea lanes are outlined by visual markers.

"Nonprecision instrument runway" means a runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight- in nonprecision instrument approach procedure has been approved, or planned, and for which no precision approach facilities are planned, or indicated on an FAA planning document or military service military airport planning document.

"Precision instrument runway" means a runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS), or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA approved airport layout plan; a military service approved military airport layout plan; any other FAA planning document, or military service military airport planning document.

"Utility runway" means a runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight and less.

"Visual runway" means a runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA approved airport layout plan, a military service approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.

[Amdt. 77-5, 33 FR 5256, Apr. 2, 1968, as amended by Amdt. 77-9, 36 FR 5969, Apr. 1, 1971]

Sec. 77.3 Standards.

(a) The standards established in this part for determining obstructions to air navigation are used by the Administrator in:

(1) Administering the Federal-aid Airport Program and the Surplus Airport Program;

(2) Transferring property of the United States under section 16 of the Federal Airport Act;

(3) Developing technical standards and guidance in the design and construction of airports; and

(4) Imposing requirements for public notice of the construction or alteration of any structure where notice will promote air safety.

(b) The standards used by the Administrator in the establishment of flight procedures and aircraft operational limitations are not set forth in this part but are contained in other publications of the Administrator.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-9, 36 FR 5970, Apr. 1, 1971]

Sec. 77.5 Kinds of Objects Affected.

This part applies to:

(a) Any object of natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used therein, and apparatus of a permanent or temporary character; and

(b) Alteration of any permanent or temporary existing structure by a change in its height (including appurtenances), or lateral dimensions, including equipment or materials used therein.

Subpart B — Notice of Construction or Alteration

Sec. 77.11 Scope.

(a) This subpart requires each person proposing any kind of construction or alteration described in Sec. 77.13(a) to give adequate notice to the Administrator. It specifies the locations and dimensions of the construction or alteration for which notice is required and prescribes the form and manner of the notice. It also requires supplemental notices 48 hours before the start and upon the completion of certain construction or alteration that was the subject of a notice under Sec. 77.13(a).

(b) Notices received under this subpart provide a basis for:

(1) Evaluating the effect of the construction or alteration on operational procedures and proposed operational procedures;

(2) Determinations of the possible hazardous effect of the proposed construction or alteration on air navigation;

(3) Recommendations for identifying the construction or alteration in accordance with the current Federal Aviation Administration Advisory Circular AC 70/7460-1 entitled "Obstruction Marking and Lighting," which is available without charge from the Department of Transportation, Distribution Unit, TAD 484.3, Washington, D.C. 20590.

(4) Determining other appropriate measures to be applied for continued safety of air navigation; and

(5) Charting and other notification to airmen of the construction or alteration.

(Sec. 6, 80 Stat. 937, 49 U.S.C. 1655
[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-8, 33 FR 18614, Dec. 17, 1968; Amdt. 77-10, 37 FR 4705, Mar. 4, 1972]

Sec. 77.13 Construction or Alteration Requiring Notice.

(a) Except as provided in Sec. 77.15, each sponsor who proposes any of the following construction or alteration shall notify the Administrator in the form and manner prescribed in Sec. 77.17:

(1) Any construction or alteration of more than 200 feet in height above the ground level at its site.

(2) Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:

(i) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with at least one runway more than 3,200 feet in actual length, excluding heliports.

(ii) 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with its longest runway no more than 3,200 feet in actual length, excluding heliports.

(iii) 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport specified in paragraph (a)(5) of this section.

(3) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) (1) or (2) of this section.

(4) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed a standard of Subpart C of this part.

(5) Any construction or alteration on any of the following airports (including heliports):

(i) An airport that is available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement.

(ii) An airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that that airport will be available for public use.

(iii) An airport that is operated by an armed force of the United States.

(b) Each sponsor who proposes construction or alteration that is the subject of a notice under paragraph (a) of this section and is advised by an FAA regional office that a supplemental notice is required shall submit that notice on a prescribed form to be received by the FAA regional office at least 48 hours before the start of the construction or alteration.

(c) Each sponsor who undertakes construction or alteration that is the subject of a notice under paragraph (a) of this section shall, within 5 days after that construction or alteration reaches its greatest height, submit a supplemental notice on a prescribed form to the FAA regional office having jurisdiction over the region involved, if—

(1) The construction or alteration is more than 200 feet above the surface level of its site; or

(2) An FAA regional office advises him that submission of the form is required.

[Amdt. 77-5, 33 FR 5256, Apr. 2, 1968, as amended by Amdt. 77-9, 36 FR 5970, Apr. 1, 1971; Amdt. 77-10, 37 FR 4705, Mar. 4, 1972]

Sec. 77.15 Construction or Alteration Not Requiring Notice.

No person is required to notify the Administrator for any of the following construction or alteration:

(a) Any object that would be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, and would be located in the congested area of a city, town, or settlement where it is evident beyond all reasonable doubt that the structure so shielded will not adversely affect safety in air navigation.

(b) Any antenna structure of 20 feet or less in height except one that would increase the height of another antenna structure.

(c) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device, of a type approved by the Administrator, or an appropriate military service on military airports, the location and height of which is fixed by its functional purpose.

(d) Any construction or alteration for which notice is required by any other FAA regulation.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-5, 33 FR 5257, Apr. 2, 1968; Amdt. 77-9, 36 FR 5970, Apr. 1, 1971]

Sec. 77.17 Form and Time of Notice.

(a) Each person who is required to notify the Administrator under Sec. 77.13(a) shall send one executed form set (four copies) of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area within which the construction or alteration will be located. Copies of FAA Form 7460-1 may be obtained from the headquarters of the Federal Aviation Administration and the regional offices.

(b) The notice required under Sec. 77.13(a) (1) through (4) must be submitted at least 30 days before the earlier of the following dates:

(1) The date the proposed construction or alteration is to begin.

(2) The date an application for a construction permit is to be filed. However, a notice relating to proposed construction or alteration that is subject to the licensing requirements of the Federal Communications Act may be sent to FAA at the same time the application for construction is filed with the Federal Communications Commission, or at any time before that filing.

(c) A proposed structure or an alteration to an existing structure that exceeds 2,000 feet in height above the ground will be presumed to be a hazard to air navigation and to result in an inefficient utilization of airspace and the applicant has the burden of overcoming that presumption. Each notice submitted under the pertinent provisions of this Part 77 proposing a structure in excess of 2,000 feet above ground, or an alteration that will make an existing structure exceed that height, must contain a detailed showing, directed to meeting this

burden. Only in exceptional cases, where the FAA concludes that a clear and compelling showing has been made that it would not result in an inefficient utilization of the airspace and would not result in a hazard to air navigation, will a determination of no hazard be issued.

(d) In the case of an emergency involving essential public services, public health, or public safety that requires immediate construction or alteration, the 30-day requirement in paragraph (b) of this section does not apply and the notice may be sent by telephone, telegraph, or other expeditious means, with an executed FAA Form 7460-1 submitted within 5 days thereafter. Outside normal business hours, emergency notices by telephone or telegraph may be submitted to the nearest FAA Flight Service Station.

(e) Each person who is required to notify the Administrator by paragraph (b) or (c) of Sec. 77.13, or both, shall send an executed copy of FAA Form 117-1, Notice of Progress of Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area involved.

(Sec. 6, 80 Stat. 937, 49 U.S.C. 1655
[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-2, 31 FR 9449, July 12, 1966; Amdt. 77-8, 33 FR 18614, Dec. 17, 1968; Amdt. 77-10, 37 FR 4705, Mar. 4, 1972; Amdt. 77-11, 54 FR 39292, Sept. 25, 1989]

Sec. 77.19 Acknowledgment of Notice.

(a) The FAA acknowledges in writing the receipt of each notice submitted under Sec. 77.13(a).

(b) If the construction or alteration proposed in a notice is one for which lighting or marking standards are prescribed in the FAA Advisory Circular AC 70/7460-1, entitled "Obstruction Marking and Lighting," the acknowledgment contains a statement to that effect and information on how the structure should be marked and lighted in accordance with the manual.

(c) The acknowledgment states that an aeronautical study of the proposed construction or alteration has resulted in a determination that the construction or alteration:

(1) Would not exceed any standard of Subpart C and would not be a hazard to air navigation;

(2) Would exceed a standard of Subpart C but would not be a hazard to air navigation; or

(3) Would exceed a standard of Subpart C and further aeronautical study is necessary to determine whether it would be a hazard to air navigation, that the sponsor may request within 30 days that further study, and that, pending completion of any further study, it is presumed the construction or alteration would be a hazard to air navigation.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-4, 32 FR 12997, Sept. 13, 1967; Amdt. 77-5, 33 FR 5257, Apr. 2, 1968

Subpart C — Obstruction Standards

Sec. 77.21 Scope.

(a) This subpart establishes standards for determining obstructions to air navigation. It applies to existing and proposed manmade objects, objects of natural growth, and terrain. The standards apply to the use of navigable airspace by aircraft and to existing air navigation facilities, such as an air navigation aid, airport, Federal airway, instrument approach or departure procedure, or approved off-airway route. Additionally, they apply to a planned facility or use, or a change in an existing facility or use, if a proposal therefore is on file with the Federal Aviation Administration or an appropriate military service on the date the notice required by Sec. 77.13(a) is filed.

(b) At those airports having defined runways with specially prepared hard surfaces, the primary surface for each such runway extends 200 feet beyond each end of the runway. At those airports having defined strips or pathways that are used regularly for the taking off and landing of aircraft and have been designated by appropriate authority as runways, but do not have specially prepared hard surfaces, each end of the primary surface for each such runway shall coincide with the corresponding end of the runway. At those airports, excluding seaplane bases, having a defined landing and takeoff area with no defined pathways for the landing and taking off of aircraft, a determination shall be made as to which portions of the landing and takeoff area are regularly used as landing and takeoff pathways. Those pathways so determined shall be considered runways and an appropriate primary surface as defined in Sec. 77.25(c) will be considered as being longitudinally centered on each runway so determined, and each end of that primary surface shall coincide with the corresponding end of that runway.

(c) The standards in this subpart apply to the effect of construction or alteration proposals upon an airport if, at the time of filing of the notice required by Sec. 77.13(a), that airport is—

(1) Available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement; or

(2) A planned or proposed airport or an airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that that airport will be available for public use; or,

(3) An airport that is operated by an armed force of the United States.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-5, 33 FR 5257, Apr. 2, 1968; Amdt. 77-9, 36 FR 5970, Apr. 1, 1971]

Sec. 77.23 Standards for Determining Obstructions.

(a) An existing object, including a mobile object, is, and a future object would be an obstruction to air navigation if it is of greater height than any of the following heights or surfaces:

(1) A height of 500 feet above ground level at the site of the object.

(2) A height that is 200 feet above ground level or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile of distance from the airport up to a maximum of 500 feet.

(3) A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

(4) A height within an en route obstacle clearance area, including turn and termination areas, of a Federal airway or approved off-airway route, that would increase the minimum obstacle clearance altitude.

(5) The surface of a takeoff and landing area of an airport or any imaginary surface established under Sec. 77.25, Sec. 77.28, or Sec. 77.29. However, no part of the take-off or landing area itself will be considered an obstruction.

(b) Except for traverse ways on or near an airport with an operative ground traffic control service, furnished by an air traffic control tower or by the airport management and coordinated with the air traffic control service, the standards of paragraph (a) of this section apply to traverse ways used or to be used for the passage of mobile objects only after the heights of these traverse ways are increased by:

(1) Seventeen feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance.

(2) Fifteen feet for any other public roadway.

(3) Ten feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road.

(4) Twenty-three feet for a railroad, and,

(5) For a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it.

[Amdt. 77-9, 36 FR 5970, Apr. 1, 1971]

Sec. 77.25 Civil Airport Imaginary Surfaces.

The following civil airport imaginary surfaces are established with relation to the airport and to each runway. The size of each such imaginary surface is based on the category of each runway according to the type of approach available or planned for that runway. The slope and dimensions of the approach surface applied to each end of a runway are determined by the most precise approach existing or planned for that runway end.

(a) Horizontal surface. A horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is:

(1) 5,000 feet for all runways designated as utility or visual;

(2) 10,000 feet for all other runways. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000-foot arc is encompassed by tangents connecting two adjacent 10,000-foot arcs, the 5,000-foot arc shall be disregarded on the construction of the perimeter of the horizontal surface.

(b) Conical surface. A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

(c) Primary surface. A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; but when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of a primary surface is:

(1) 250 feet for utility runways having only visual approaches.

(2) 500 feet for utility runways having nonprecision instrument approaches.

(3) For other than utility runways the width is:

(i) 500 feet for visual runways having only visual approaches.

(ii) 500 feet for nonprecision instrument runways having visibility minimums greater than three-fourths statute mile.

(iii) 1,000 feet for a nonprecision instrument runway having a nonprecision instrument approach with visibility minimums as low as three-fourths of a statute mile, and for precision instrument runways. The width of the primary surface of a runway will be that width prescribed in this section for the most precise approach existing or planned for either end of that runway.

(d) Approach surface. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end.

(1) The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:

(i) 1,250 feet for that end of a utility runway with only visual approaches;

(ii) 1,500 feet for that end of a runway other than a utility runway with only visual approaches;

(iii) 2,000 feet for that end of a utility runway with a nonprecision instrument approach;

(iv) 3,500 feet for that end of a nonprecision instrument runway other than utility, having visibility minimums greater than three-fourths of a statute mile;

(v) 4,000 feet for that end of a nonprecision instrument runway, other than utility, having a nonprecision instrument approach with visibility minimums as low as three-fourths statute mile; and

(vi) 16,000 feet for precision instrument runways.

(2) The approach surface extends for a horizontal distance of:

(i) 5,000 feet at a slope of 20 to 1 for all utility and visual runways;

(ii) 10,000 feet at a slope of 34 to 1 for all nonprecision instrument runways other than utility; and,

(iii) 10,000 feet at a slope of 50 to 1 with an additional 40,000 feet at a slope of 40 to 1 for all precision instrument runways.

(3) The outer width of an approach surface to an end of a runway will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.

(e) Transitional surface. These surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces. Transitional surfaces for those portions of the precision approach surface which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline.

[Amdt. 77-9, 36 FR 5970, Apr. 1, 1971; 36 FR 6741, Apr. 8, 1971]

Sec. 77.27 [Reserved]

Sec. 77.28 Military airport imaginary surfaces.

(a) Related to airport reference points. These surfaces apply to all military airports. For the purposes of this section a military airport is any airport operated by an armed force of the United States.

(1) Inner horizontal surface. A plane is oval in shape at a height of 150 feet above the established airfield elevation. The plane is constructed by scribing an arc with a radius of 7,500 feet about the centerline at the end of each runway and interconnecting these arcs with tangents.

(2) Conical surface. A surface extending from the periphery of the inner horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation.

(3) Outer horizontal surface. A plane, located 500 feet above the established airfield elevation, extending outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet.

(b) Related to runways. These surfaces apply to all military airports.

(1) Primary surface. A surface located on the ground or water longitudinally centered on each runway with the same length as the runway. The width of the primary surface for runways is 2,000 feet. However, at established bases where substantial construction has taken place in accordance with a previous lateral clearance criteria, the 2,000-foot width may be reduced to the former criteria.

(2) Clear zone surface. A surface located on the ground or water at each end of the primary surface, with a length of 1,000 feet and the same width as the primary surface.

(3) Approach clearance surface. An inclined plane, symmetrical about the runway centerline extended, beginning 200 feet beyond each end of the primary surface at the centerline elevation of the runway end and extending for 50,000 feet. The slope of the approach clearance surface is 50 to 1 along the runway centerline extended until it reaches an elevation of 500 feet above the established airport elevation. It then continues horizontally at this elevation to a point 50,000 feet from the point of beginning. The width of this surface at the runway end is the same as the primary surface, it flares uniformly, and the width at 50,000 is 16,000 feet.

(4) Transitional surfaces. These surfaces connect the primary surfaces, the first 200 feet of the clear zone surfaces, and the approach clearance surfaces to the inner horizontal surface, conical surface, outer horizontal surface or other transitional surfaces. The slope of the transitional surface is 7 to 1 outward and upward at right angles to the runway centerline.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-1, 30 FR 6713, May 18, 1965; Amdt. 77-9, 36 FR 5971, Apr. 1, 1971]

Sec. 77.29 Airport Imaginary Surfaces for Heliports.

(a) Heliport primary surface. The area of the primary surface coincides in size and shape with the designated take-off and landing area of a heliport. This surface is a horizontal plane at the elevation of the established heliport elevation.

(b) Heliport approach surface. The approach surface begins at each end of the heliport primary surface with the same width as the primary surface, and extends outward and upward for a horizontal distance of 4,000 feet where its width is 500 feet. The slope of the approach surface is 8 to 1 for civil heliports and 10 to 1 for military heliports.

(c) Heliport transitional surfaces. These surfaces extend outward and upward from the lateral boundaries of the heliport primary surface and from the approach surfaces at a slope of 2 to 1 for a distance of 250 feet measured horizontally from the centerline of the primary and approach surfaces.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-9, 36 FR 5971, Apr. 1, 1971; 36 FR 6741, Apr. 8, 1971]

Subpart D — Aeronautical Studies of Effect of Proposed Construction on Navigable Airspace

Sec. 77.31 Scope.

(a) This subpart applies to the conduct of aeronautical studies of the effect of proposed construction or alteration on the use of air navigation facilities or navigable airspace by aircraft. In the aeronautical studies, present and future IFR and VFR aeronautical operations and procedures are reviewed and any possible changes in those operations and procedures and in the construction proposal that would eliminate or alleviate the conflicting demands are ascertained.

(b) The conclusion of a study made under this subpart is normally a determination as to whether the specific proposal studied would be a hazard to air navigation.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-6, 33 FR 10843, July 31, 1968]

Sec. 77.33 Initiation of Studies.

(a) An aeronautical study is conducted by the FAA:

(1) Upon the request of the sponsor or any construction or alteration for which a notice is submitted under Subpart B of this part, unless that construction or alteration would be located within an antenna farm area established under Subpart F of this part; or

(2) Whenever the FAA determines it appropriate.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-4, 32 FR 12997, Sept. 13, 1967]

Sec. 77.35 Aeronautical Studies.

(a) The Regional Manager, Air Traffic Division of the region in which the proposed construction or alteration would be located, or his designee, conducts the aeronautical study of the effect of the proposal upon the operation of air navigation facilities and the safe and efficient utilization of the navigable airspace. This study may include the physical and electromagnetic radiation effect the proposal may have on the operation of an air navigation facility.

(b) To the extent considered necessary, the Regional Manager, Air Traffic Division or his designee:

(1) Solicits comments from all interested persons;

(2) Explores objections to the proposal and attempts to develop recommendations for adjustment of aviation requirements that would accommodate the proposed construction or alteration;

(3) Examines possible revisions of the proposal that would eliminate the exceeding of the standards in Subpart C of this part; and

(4) Convenes a meeting with all interested persons for the purpose of gathering all facts relevant to the effect of the proposed construction or alteration on the safe and efficient utilization of the navigable airspace.

(c) The Regional Manager, Air Traffic Division or his designee issues a determination as to whether the proposed construction or alteration would be a hazard to air navigation and sends copies to all known interested persons. This determination is final unless a petition for review is granted under Sec. 77.37.

(d) If the sponsor revises his proposal to eliminate exceeding of the standards of Subpart C of this part, or withdraws it, the Regional Manager, Air Traffic Division, or his designee, terminates the study and notifies all known interested persons.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-6, 33 FR 10843, July 31, 1968; Amdt. 77-11, 54 FR 39292, Sept. 25, 1989]

Sec. 77.37 Discretionary Review.

(a) The sponsor of any proposed construction or alteration or any person who stated a substantial aeronautical objection to it in an aeronautical study, or any person who has a substantial aeronautical objection to it but was not given an opportunity to state it, may petition the Administrator, within 30 days after issuance of the determination under Sec. 77.19 or Sec. 77.35 or revision or extension of the determination under Sec. 77.39(c), for a review of the determination, revision, or extension. This paragraph does not apply to any acknowledgment issued under Sec. 77.19(c)(1).

(b) The petition must be in triplicate and contain a full statement of the basis upon which it is made.

(c) The Administrator examines each petition and decides whether a review will be made and, if so, whether it will be:

(1) A review on the basis of written materials, including study of a report by the Regional Manager, Air Traffic Division of the aeronautical study, briefs, and related submissions by any interested party, and other relevant facts, with the Administrator affirming, revising, or reversing the determination issued under Sec. 77.19, Sec. 77.35 or Sec. 77.39(c); or

(2) A review on the basis of a public hearing, conducted in accordance with the procedures prescribed in Subpart E of this part.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-3, 32 FR 6970, May 6, 1967; Amdt. 77-11, 54 FR 39292, Sept. 25, 1989]

Sec. 77.39 Effective Period of Determination of No Hazard.

(a) Unless it is otherwise extended, revised, or terminated, each final determination of no hazard made under this subpart or Subpart B or E of this part expires 18 months after its effective date, regardless of whether the proposed construction or alteration has been started, or on the date the proposed construction or alteration is abandoned, whichever is earlier.

(b) In any case, including a determination to which paragraph (d) of this section applies, where the proposed construction or alteration has not been started during the applicable period by actual structural work, such as the laying of a foundation, but not including excavation, any interested person may, at least 15 days before the date the final determination expires, petition the FAA official who issued the determination to:

(1) Revise the determination based on new facts that change the basis on which it was made; or

(2) Extend its effective period.

(c) The FAA official who issued the determination reviews each petition presented under paragraph (b) of this section, and revises, extends, or affirms the determination as indicated by his findings.

(d) In any case in which a final determination made under this subpart or Subpart B or E of this part relates to proposed construction or alteration that may not be started unless the Federal Communications Commission issues an appropriate construction permit, the effective period of each final determination includes—

(1) The time required to apply to the Commission for a construction permit, but not more than 6 months after the effective date of the determination; and

(2) The time necessary for the Commission to process the application except in a case where the Administrator determines a shorter effective period is required by the circumstances.

(e) If the Commission issues a construction permit, the final determination is effective until the date prescribed for completion of the construction. If the Commission refuses to issue a construction permit, the final determination expires on the date of its refusal.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-5, 33 FR 5257, Apr. 2, 1968]

Subpart E — Rules of Practice for Hearings Under Subpart D

Sec. 77.41 Scope.

This subpart applies to hearings held by the FAA under Titles I, III, and X of the Federal Aviation Act of 1958 (49 U.S.C. Subchapters I, III, and X), on proposed construction or alteration that affects the use of navigable airspace.

Sec. 77.43 Nature of Hearing.

Sections 4, 5, 7, and 8 of the Administrative Procedure Act (5 U.S.C. 1003, 1004, 1006, and 1007) do not apply to hearings held on proposed construction or alteration to determine its effect on the safety of aircraft and the efficient use of navigable airspace because those hearings are fact-finding in nature. As a fact-finding procedure, each hearing is nonadversary and there are no formal pleadings or adverse parties.

Sec. 77.45 Presiding Officer.

(a) If, under Sec. 79.37, the Administrator grants a public hearing on any proposed construction or alteration covered by this part, the Director, Air Traffic Operations Service designates an FAA employee to be the presiding officer at the hearing.

(b) The presiding officer may:

(1) Give notice of the date and location of the hearing and any prehearing conference that may be held;

(2) Administer oaths and affirmations;

(3) Examine witnesses;

(4) Issue subpoenas and take depositions or have them taken;

(5) Obtain, in the form of a public record, all pertinent and relevant facts relating to the subject matter of the hearing;

(6) Rule, with the assistance of the legal officer, upon the admissibility of evidence;

(7) Regulate the course and conduct of the hearing; and

(8) Designate parties to the hearing and revoke those designations.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-11, 54 FR 39292, Sept. 25, 1989]

Sec. 77.47 Legal Officer.

The Chief Counsel designates a member of his staff to serve as legal officer at each hearing under this subpart. The legal officer may examine witnesses and assist and advise the presiding officer on questions of evidence or other legal questions arising during the hearing.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended at 38 FR 26444, Sept. 17, 1973]

Sec. 77.49 Notice of Hearing.

In designating a time and place for a hearing under this subpart the presiding officer considers the needs of the FAA and the convenience of the parties and witnesses. The time and place of each hearing is published in the "Notices" section of the Federal Register before the date of the hearing, unless the notice is impractical or unnecessary.

Sec. 77.51 Parties to the Hearing.

The presiding officer designates the following as parties to the hearing—

(a) The proponent of the proposed construction or alteration.

(b) Those persons whose activities would be substantially affected by the proposed construction or alteration.

Sec. 77.53 Prehearing Conference.

(a) The presiding officer may, in his discretion, hold a prehearing conference with the parties to the hearing and the legal officer before the hearing.

(b) At the direction of the presiding officer, each party to a prehearing conference shall submit a brief written statement of the evidence he intends to provide through his witnesses and by questioning other witnesses at the hearing, and shall provide enough copies of the statement so that the presiding officer may keep three for the FAA and give one to each other party.

(c) At the prehearing conference, the presiding officer reduces and simplifies the subject matter of the hearing so far as possible and advises the parties of the probable order of presenting the evidence.

Sec. 77.55 Examination of Witnesses.

(a) Each witness at a hearing under this subpart shall, after being sworn by the presiding officer, give his testimony under oath.

(b) The party for whom a witness, other than an employee of the FAA, is testifying shall examine that witness. After that examination, other parties to the hearing may examine the witness, in the order fixed by the presiding officer. The presiding officer and the legal officer may then examine the witness. The presiding officer may grant any party an additional opportunity to examine any witness, if that party adequately justifies the additional examination.

(c) The legal officer examines each FAA employee who is a witness, before the other parties examine him. After that examination, the order prescribed in paragraph (b) of this section applies. An FAA employee may testify only as to facts within his personal knowledge and the application of FAA regulations, standards, and policies.

Sec. 77.57 Evidence.

(a) The presiding officer receives all testimony and exhibits that are relevant to the issues of the hearing. So far as possible, each party shall submit enough copies of his exhibits that the presiding officer may keep three copies for the FAA and give one to each other party.

(b) The presiding officer excludes any testimony that is irrelevant, unduly repetitious, or consists of statements made during an aeronautical study in an effort to reconcile or compromise aviation or construction or alteration requirements. A party to the hearing may object to the admission of evidence only on the ground that it is irrelevant.

Sec. 77.59 Subpoenas of Witnesses and Exhibits.

(a) The presiding officer of a hearing may issue subpoenas for any witness or exhibit that he determines may be material and relevant to the issues of the hearing. So far as possible, each party to the hearing shall provide the witnesses and exhibits that he intends to present at the hearing.

(b) If any party to the hearing is unable to provide his necessary witnesses and exhibits, he shall advise the presiding officer far enough in advance that the presiding officer can determine whether he should issue subpoenas for the desired witnesses or exhibits.

Sec. 77.61 Revision of Construction or Alteration Proposal.

(a) The sponsor of any proposed construction or alteration covered by this part may revise his proposal at any time before or during the hearing. If he revises it, the presiding officer decides whether the revision affects the proposal to the extent that he should send it to the Administrator for a redetermination of the need for a hearing.

(b) If the presiding officer decides that it does not need to be resubmitted to the Administrator, he advises the parties of the revised proposal and takes the action necessary to allow all parties to effectively participate in the hearing on the revised proposal. Without limiting his discretion, the presiding officer may recess and reconvene the hearing, or hold another prehearing conference.

Sec. 77.63 Record of Hearing.

(a) Each hearing is recorded verbatim by an official reporter under an FAA contract. The transcript, and all exhibits, become a part of the record of the hearing.

(b) Any person may buy a copy of the transcript of the hearing from the reporter at the price fixed for it.

(c) The presiding officer may allow any party to withdraw an original document if he submits authenticated copies of it.

(d) Any person may buy, from the FAA, photostatic copies of any exhibit by paying the copying costs.

(e) A change in the official transcript of a hearing may be made only if it involves an error of substance. Any recommendation to correct the transcript must be filed with the presiding officer within 5 days after the hearing closes. The presiding officer reviews each request for a correction to the extent he considers appropriate and shall make any revisions that he finds appropriate as a result of that review.

Sec. 77.65 Recommendations by Parties.

Within 20 days after the mailing of the record of hearing by the official reporter, or as otherwise directed by the presiding officer, each party may submit to the presiding officer five copies of his recommendations for a final decision to be made by the Administrator.

Sec. 77.67 Final Decision of the Administrator.

After reviewing the evidence relevant to the questions of fact in a hearing, including the official transcript and the exhibits, the Administrator resolves all these questions, based on the weight of evidence, and makes his determination, stating the basis and reasons for it. He then issues an appropriate order to be served on each of the parties.

Sec. 77.69 Limitations on Appearance and Representation.

(a) A former officer or employee of the FAA may not appear on behalf of, or represent, any party before the FAA in connection with any matter to which this part applies, if he considered or passed on that matter while he was an officer or employee of the FAA.

(b) A person appearing before the FAA on any matter to which this part applies may not, in connection with that appearance, knowingly accept assistance from, or share fees with, any person who is prohibited by paragraph (a) of this section, from appearing himself on that matter.

(c) A former official or employee of the FAA may not, within 6 months after he ceases to be such an officer or employee, appear before the FAA on behalf of, or represent, any party in connection with any proceeding that was pending under this part while he was an officer or employee of the FAA, unless he obtains written consent from an appropriate officer of the FAA, based on a verified showing that he did not personally consider the matter concerned or gain particular knowledge of it while he was an officer or employee of the FAA.

Subpart F — Establishment of Antenna Farm Areas

Sec. 77.71 Scope.

(a) This subpart establishes antenna farm areas in which antenna structures may be grouped to localize their effect on the use of navigable airspace.

(b) It is the policy of the FAA to encourage the use of antenna farms and the single structure-multiple antenna concept for radio and television towers whenever possible. In considering proposals for establishing antenna farm areas, it considers as far as possible the revision of aeronautical procedures and operations to accommodate antenna structures that will fulfill broadcasting requirements.

Sec. 77.73 General Provisions.

(a) An antenna farm area consists of a specified geographical location with established dimensions of area and height, where antenna towers with a common impact on aviation may be grouped. Each such area is established by appropriate rule making action.

(b) Each proposal for an antenna farm area is evaluated on the basis of its effect on the use of navigable airspace. The views of the Federal Communications Commission are requested on the effect that each establishment of an antenna farm area would have on its statutory responsibilities. Any views submitted by it are fully considered before the antenna farm concerned is established. If the Commission advises that the establishment of any proposed antenna farm area would interfere with its statutory responsibility, the proposed area is not established.

(c) The establishment of an antenna farm area is considered whenever it is proposed by:

(1) The FAA;

(2) The Federal Communications Commission;

(3) The sponsor of a proposed antenna tower; or

(4) Any other person having a substantial interest in a proposed antenna tower.

[Doc. No. 1882, 30 FR 1839, Feb. 10, 1965, as amended by Amdt. 77-10, 37 FR 4705, Mar. 4, 1972]

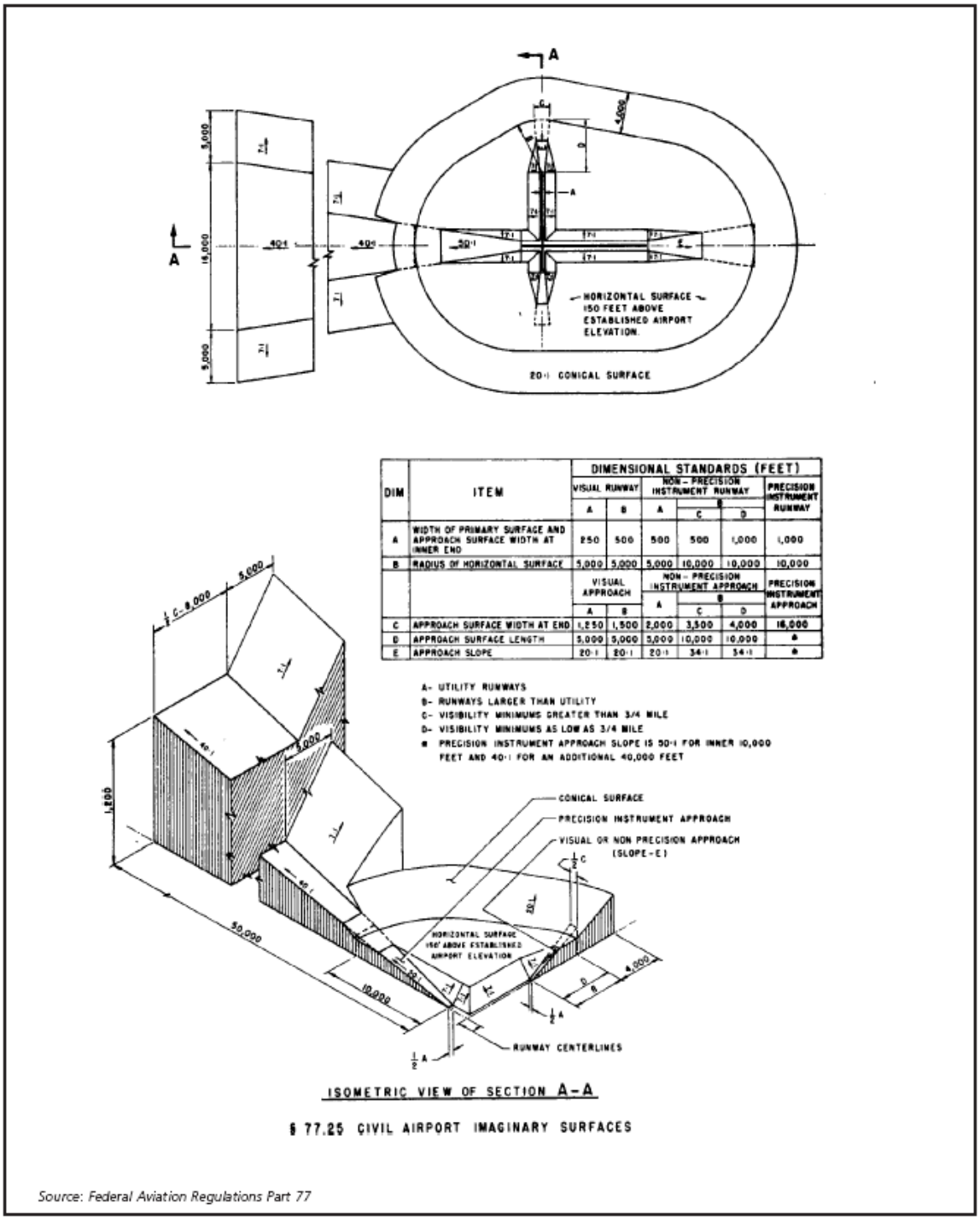
Sec. 77.75 Establishment of Antenna Farm Areas.

The airspace areas described in the following sections of this subpart are established as antenna farm areas.

Note: Sections 77.77 through 77.1100 reserved for descriptions of antenna farm areas.

14 CFR Part 77 * Amendment 77-12 * Dec. 28, 1995.

FIGURE C-1
FAR PART 77 IMAGINARY SURFACES



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B C	B D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	B C	B D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	*
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	*

A- UTILITY RUNWAYS
B- RUNWAYS LARGER THAN UTILITY
C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
* PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET

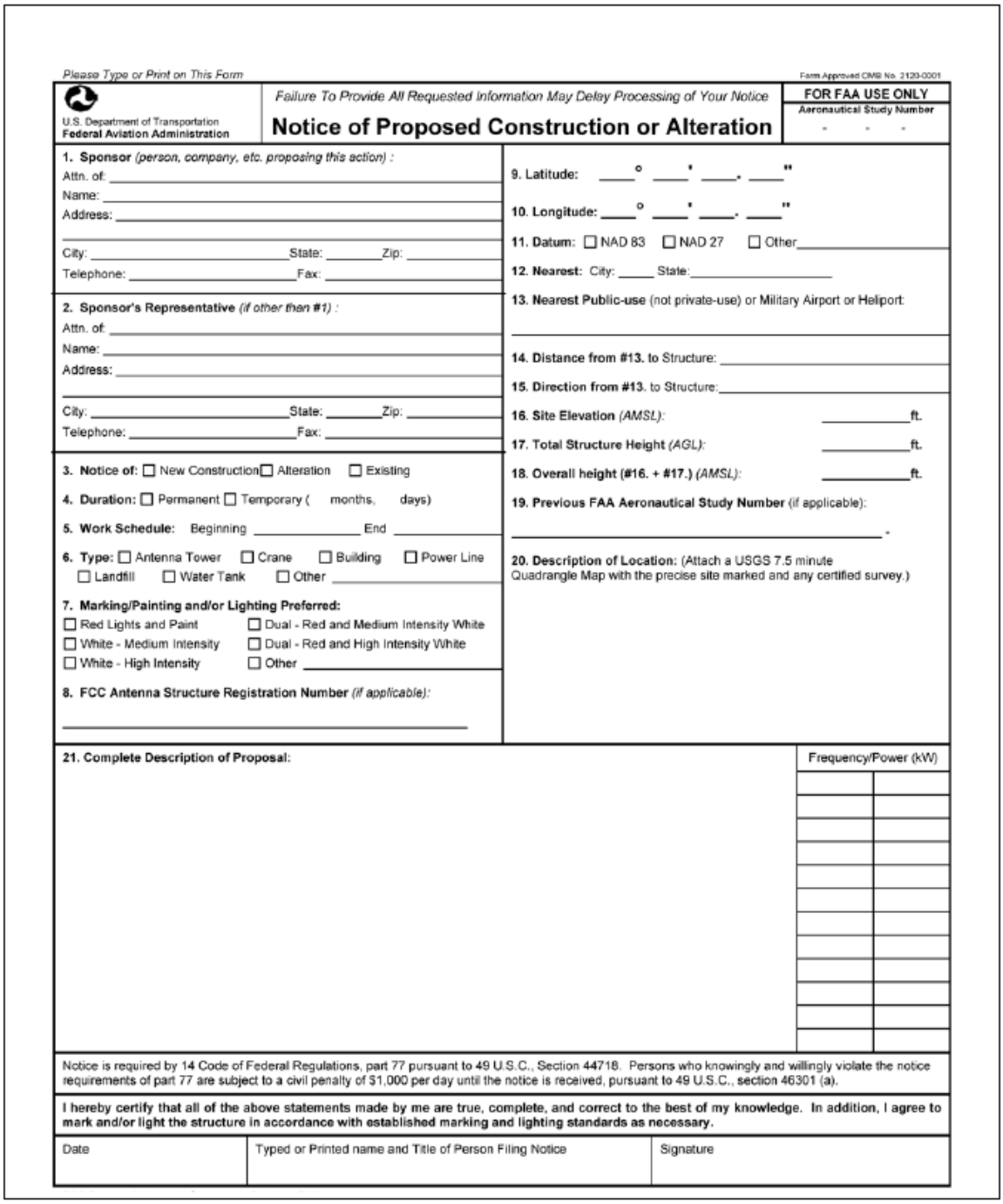
ISOMETRIC VIEW OF SECTION A-A

§ 77.25 CIVIL AIRPORT IMAGINARY SURFACES

Source: Federal Aviation Regulations Part 77

Source: Caltrans, *California Airport Land Use Planning Handbook*, January 2002.

FIGURE B-2
NOTIFICATION OF PROPOSED CONSTRUCTION OR ALTERATION (FAA FORM 7460)



Please Type or Print on This Form — Form Approved OMB No. 2120-0001

U.S. Department of Transportation
Federal Aviation Administration

Failure To Provide All Requested Information May Delay Processing of Your Notice

Notice of Proposed Construction or Alteration

FOR FAA USE ONLY
Aeronautical Study Number
- - -

1. Sponsor *(person, company, etc. proposing this action)* :
Attn. of: _____
Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Telephone: _____ Fax: _____

2. Sponsor's Representative *(if other than #1)* :
Attn. of: _____
Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Telephone: _____ Fax: _____

3. Notice of: ☐ New Construction ☐ Alteration ☐ Existing

4. Duration: ☐ Permanent ☐ Temporary (months, days)

5. Work Schedule: Beginning _____ End _____

6. Type: ☐ Antenna Tower ☐ Crane ☐ Building ☐ Power Line
☐ Landfill ☐ Water Tank ☐ Other _____

7. Marking/Painting and/or Lighting Preferred:
☐ Red Lights and Paint ☐ Dual - Red and Medium Intensity White
☐ White - Medium Intensity ☐ Dual - Red and High Intensity White
☐ White - High Intensity ☐ Other _____

8. FCC Antenna Structure Registration Number *(if applicable)*:
_____

9. Latitude: ____° ____' ____.____"

10. Longitude: ____° ____' ____.____"

11. Datum: ☐ NAD 83 ☐ NAD 27 ☐ Other _____

12. Nearest: City: _____ State: _____

13. Nearest Public-use (not private-use) or Military Airport or Heliport:
_____

14. Distance from #13. to Structure: _____

15. Direction from #13. to Structure: _____

16. Site Elevation *(AMSL)*: _____ ft.

17. Total Structure Height *(AGL)*: _____ ft.

18. Overall height (#16. + #17.) *(AMSL)*: _____ ft.

19. Previous FAA Aeronautical Study Number (if applicable):
_____ -

20. Description of Location: (Attach a USGS 7.5 minute Quadrangle Map with the precise site marked and any certified survey.)

21. Complete Description of Proposal:

Frequency/Power (kW)	

Notice is required by 14 Code of Federal Regulations, part 77 pursuant to 49 U.S.C., Section 44718. Persons who knowingly and willingly violate the notice requirements of part 77 are subject to a civil penalty of $1,000 per day until the notice is received, pursuant to 49 U.S.C., section 46301 (a).

I hereby certify that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to mark and/or light the structure in accordance with established marking and lighting standards as necessary.

Date	Typed or Printed name and Title of Person Filing Notice	Signature

Source: Caltrans, *California Airport Land Use Planning Handbook*, January 2002.

Appendix D
Methods for Determining Concentrations of People



APPENDIX D
Methods for Determining Concentrations of People

Introduction

The underlying compatibility criterion used in this ALUCP is "usage intensity", or more specifically, the maximum number of people per acre that can be present in a given location at any given time. Actions considered "incompatible" with the compatibility planning policies in this ALUCP would be uses that exceed the maximum intensity. Usage intensity is identified in the *California Airport Land Use Planning Handbook* (Caltrans, January 2002) as the means best suited for assessing land use safety compatibility for airports. Recognition, however, must be given to the fact that "people per acre" is not a common measure employed in other facets of land use planning. As such, this ALUCP utilizes the more common measure of floor area ratio (FAR) as a means of applying usage criteria.

Counting People

Determining the number of people expected to use a facility at a single point in time involves estimating not just employees, but customers and visitors as well. Exceptions can be made in rare situations when a facility is used for an event it is not designed for (i.e, when a parking lot is used for a fairground), and it is expected that extra precautions be taken as appropriate.

In ideal situations, the actual or intended number of people for which a facility is designed would be known. However, many buildings are constructed without a specific number of occupants in mind, and the use of the site remains unknown until a tenant is found. Other uses can further compound the question of usage intensity when they are open, or have no fixed seating, like malls and athletic fields for example.

Given the lack of measurable occupancy numbers, other sources can be used to determine the number of people in a proposed development.

- *Parking Ordinance*: The number of people present in a given area can be calculated based upon the number of parking spaces provided. Some assumption regarding the number of people per vehicle needs to be developed to calculate the number of people on-site. The number of people per acre can then be calculated by dividing the number of people on-site by the size of the parcel in acres. This approach is appropriate where the use is expected to be dependent upon access by vehicles. Depending upon the specific

assumptions utilized, this methodology typically results in a number in the low end of the likely intensity for a given land use.

- *Maximum Occupancy*: The Uniform or California Building Code (CBC) can be used as a standard for determining the maximum occupancy of certain uses. The chart provided in Table D-1 indicates the required number of square feet per occupant. The number of people on the site can be calculated by dividing the total floor area of a proposed use by the minimum square feet per occupant requirement listed in the table.

Sample calculations based upon parking space requirements and the Uniform Building Code are provided in Exhibit D-1.

Calculating Usage Intensities

Once the number of people expected to be present over an entire site has been estimated, the usage intensity can be determined. The criteria presented in Chapter 3 of this ALUCP were developed in terms of average intensity over the project site as a whole.

The average intensity is developed by dividing the total number of people expected to use a site by the size of the site itself (e.g., 400 people / 5 acre site = average intensity of 80 people per acre). Once the average usage intensity of a proposed project has been determined, the results can be compared with the criteria set forth in this ALUCP in order to determine consistency.

Calculating Floor Area Ratio

Floor area ration (FAR), the gross square footage of the building(s) on a site divided by the site size, is a more common measure in land use planning than usage intensity calculations. As such, FAR criteria, as seen in Table 3-2, were integrated into this ALUCP in order to establish usage intensity limits for various types of nonresidential land uses.

FAR, however, does not directly relate to the underlying issue of risk due to the fact that the FAR for different types of buildings can be the same despite their level of use (e.g., a warehouse versus a restaurant). Therefore, in order to make FAR applicable to land use compatibility planning, a connection between usage intensity and FAR needed to be established. To achieve this, assumptions, rooted in the CBC, were made as to how much square footage a person may occupy in a given building (see Table D-1). Once this was determined, the following equation was applied to determine the FAR for a given nonresidential use:

$$\text{FAR} = \frac{\text{(allowable usage intensity) x (occupancy load factor)}}{\text{43,560 sq. feet per acre}}$$

In this equation, *usage intensity* is understood in terms of people per acre, and *occupancy load factor* as square feet per person. The guideline for determining usage intensity numbers is found in the *Handbook* (see Appendix C), and the occupancy levels were provided in the CBC (see Table D-2). The FAR limits were calculated from these two numbers using the formula above.

EXHIBIT D-1

Example 1

Proposed Development: Two office buildings, each two stories and containing 20,000 square feet of floor area per building. Site size is 3.0 net acres. Counting a portion of the adjacent road, the gross area of the site is 3.5± acres.

A. *Calculation Based on Parking Space Requirements*

For office uses, assume that a county or city parking ordinance requires 1 parking space for every 300 square feet of floor area. Data from traffic studies or other sources can be used to estimate the average vehicle occupancy. For the purposes of this example, the number of people on the property is assumed to equal 1.5 times the number of parking spaces.

The average usage intensity would therefore be calculated as follows:

1) 40,000 sq. ft. floor area x 1.0 parking space per 300 sq. ft. = 134 required parking spaces
2) 134 parking spaces x 1.5 people per space = 200 people maximum on site
3) 200 people ÷ 3.5 acres gross site size = 57 people per acre average for the site

Assuming that occupancy of each building is relatively equal throughout, but that there is some separation between the buildings and outdoor uses are minimal, the usage intensity for a single acre would be estimated to be:

1) 20,000 sq. ft. bldg. ÷ 2 stories = 10,000 sq. ft. bldg. footprint
2) 10,000 sq. ft. bldg. footprint ÷ 43,560 sq. ft. per acre = 0.23 acre bldg. footprint
3) Building footprint < 1.0 acre; therefore maximum people in 1 acre = bldg. occupancy = 100 people per single acre

B. *Calculation Based on Uniform Building Code*

Using the UBC (Appendix C1) as the basis for estimating building occupancy yields the following results for the above example:

1) 40,000 sq. ft. bldg. ÷ 100 sq. ft./occupant = 400 people max. bldg. occupancy (under UBC)
2) 400 max. bldg. occupancy x 50% adjustment = 200 people maximum on site
3) 200 people ÷ 3.5 acres gross site size = 57 people per acre average for the site

Conclusions: In this instance, both methodologies give the same results. For different uses and/or different assumptions, the two methodologies are likely to produce different numbers. In most such cases, the UBC methodology will indicate a higher intensity.

EXHIBIT D-1 CONT.

Example 2

Proposed Development: Single-floor furniture store containing 24,000 square feet of floor area on a site of 1.7 net acres. Counting a portion of the adjacent road, the gross area of the site is 2.0 acres).

A. Calculation Based on Parking Space Requirements

For furniture stores, the county requires 1 parking space per 400 square feet of use area. Assuming 1.5 people per automobile, the average usage intensity would be:

1) 24,000 sq. ft. bldg. x 1.0 parking space per 400 sq. ft. = 60 required parking spaces
2) 60 parking spaces x 1.5 people per space = 90 people maximum on site
3) 90 people ÷ 1.26 acres gross site size = 72 people per acre average for the site

Again assuming a relatively balanced occupancy throughout the building and that outdoor uses are mini mal, the usage intensity for a single acre would be estimated to be:

1) 24,000 sq. ft. bldg. footprint ÷ 43,560 sq. ft. per acre = 0.55 acre bldg. footprint
3) Building footprint < 1.0 acre; therefore maximum people in 1 acre = bldg. occupancy = 90 people per single acre

B. Calculation Based on Uniform Building Code

For the purposes of the UBC-based methodology, the furniture store is assumed to be consist of 50% retail sales floor (at 30 square feet per occupant) and 50% warehouse (at 500 square feet per occupant). Usage intensities would therefore be estimated as follows:

1) 12,000 sq. ft. retail floor area ÷ 30 sq. ft./occupant = 400 people max. occupancy in retail area
2) 12,000 sq. ft. warehouse floor area ÷ 500 sq. ft./occupant = 24 people max. occupancy in warehouse area
3) Maximum occupancy under UBC assumptions = 400 + 24 = 424 people
4) Assuming typical peak occupancy is 50% of UBC numbers = 212 people maximum expected at any one time
5) 212 people ÷ 1.26 acres = 168 people per acre average for the site

With respect to the single-acre intensity criteria, the entire building occupancy would again be within less than 1.0 acre, thus yielding the same intensity of 168 people per single acre.

Conclusions: In this instance, the two methods produce very different results. The occupancy estimate of 30 square feet per person is undoubtedly low for a furniture store even after the 50% adjustment. The 72 people-per-acre estimate using the parking requirement methodology is probably closer to being realistic. As part of the general plan consistency process, ALUCs and local jurisdictions should decide which method or combination of methods is to be used in reviewing development proposals.

Source: Caltrans, California Airport Land Use Planning Handbook, January 2002.

TABLE D-1
OCCUPANCY LEVELS – CALIFORNIA BUILDING CODE

Use	Minimum Square Feet per Occupant
1. Aircraft Hangars (no repair)	500
2. Auction Rooms	7
3. Assembly Areas, Concentrated Use Without Fixed Seats (auditoriums, churches, dance floors, lobby accessory to assembly occupancy, lodge rooms, reviewing stands, stadiums, waiting areas)	7
4. Assembly Areas, Less Concentrated Use (conference rooms, dining rooms, drinking establishments, exhibit rooms, gymnasiums, lounges, stages)	15
Gaming	11
5. Bowling Alley (assume no occupant load for bowling lanes)	4
6. Children's Homes and Homes for the Aged	80
7. Classrooms	20
8. Congregate Residences	200
9. Courtrooms	40
10. Dormitories	50
11. Dwellings	300
12. Exercising Rooms	50
13. Garage, Parking	200
14. Health-Care Facilities	80
Sleeping Rooms	120
Treatment Rooms	240
15. Hotels and Apartments	200
16. Kitchen - Commercial	200
17. Library Reading Room	50
Stack Areas	100
18. Locker Rooms	50
19. Malls	Varies
20. Manufacturing Areas	200
21. Mechanical Equipment Room	300
22. Nurseries for Children (Daycare)	35
23. Offices	100
24. School Shops and Vocational Rooms	50
25. Skating Rinks	50 on the skating area; 15 on the deck
26. Storage and Stock Rooms	300
27. Stores - Retail Sales Rooms	
Basements and Ground Floors	30
Upper Floors	60
28. Swimming Pools	50 for the pool area; 15 on the deck
29. Warehouses	500
30. All Others	100

Source: *California Building Code* (2001), Table 10-A.

TABLE D-2
OCCUPANCY TYPES – CALIFORNIA BUILDING CODE

Group and Division	CBC Section	Description of Occupancy
A-1	303.1.1	A building or portion of a building having an assembly room with an occupant load of 1,000 or more and a legitimate stage.
A-2		A building or portion of a building having an assembly room with an occupant load of less than 1,000 and a legitimate stage.
A-2.1		A building or portion of a building having an assembly room with an occupant load of 300 or more without a legitimate stage, including such buildings used for educational purposes and not classed as a Group E or Group B Occupancy.
A-3		A building or portion of a building having an assembly room with an occupant load of less than 300 without a legitimate stage, including such buildings used for educational purposes and not classed as a Group E or Group B Occupancy.
A-4		Stadiums, reviewing stands and amusement park structures not included within other Group A Occupancies.
B	304.1	A building or structure, or a portion thereof, for office, professional, or service-type transactions, including storage of records and accounts; eating establishments and drinking establishments with an occupant load of less than 50.
E-1	305.1	Any building used for educational purposes through the 12th grade by 50 or more persons for more than 12 hours per week or four hours in any one day.
E-2		Any building used for educational purposes through the 12th grade by less than 50 persons for more than 12 hours per week or four hours in any one day.
E-3		Any building or portion thereof used for day-care purposes for more than six persons.
F-1	306.1	Moderate-hazard factory and industrial occupancies include factory and industrial uses not classified in as Group F, Division 2 Occupancies.
F-2		Low-hazard factory and industrial occupancies include facilities producing noncombustible or nonexplosive materials that during finishing, packing or processing do not involve a significant fire hazard.
H-1	307.1	Occupancies with a quantity of material in the building in excess of those listed in Table 3-D that present a high explosion hazard as listed in Section 307.1.1.
H-2		Occupancies with a quantity of material in the building in excess of those listed in Table 3-D that present a moderate explosion hazard as listed in Section 307.1.1.
H-3		Occupancies with a quantity of material in the building in excess of those listed in Table 3-D that present a high fire or physical hazard as listed in Section 307.1.1.
H-4		Repair garages not classified as Group S, Division 3 Occupancies.
H-5		Aircraft repair hangars not classified as Group S, Division 5 Occupancies and heliports.
H-6	307.1 and 307.11	Semiconductor fabrication facilities and comparable research and development areas when the facilities in which the hazardous production materials are used, and the aggregate quantity of the material is in excess of those listed in Table 3-D or 3-E.
H-7	307.1	Occupancies having quantities of materials in excess of those listed in Table 3-E that are health hazards as listed in Section 307.1.1.
I-1.1	308.1	Nurseries for the full-time care of children under the age of six (each accommodating more than five children), hospitals, sanitariums, nursing homes with nonambulatory patients and similar buildings (each accommodating more than 5 patients [*for SFM*] six patients or children).
I-1.2		Health-care centers for ambulatory patients receiving outpatient medical care which may render the patient incapable of unassisted self-preservation (each tenant space accommodating more than five such patients).
I-2		Nursing homes for ambulatory patients, homes for children six years of age or older (each accommodating more than five persons [*for SMF*] six patients or children).
I-3		Mental hospitals, mental sanitariums, jails, prisons, reformatories and buildings where personal liberties of inmates are similarly restrained.
M	309.1	A building or structure, or a portion thereof, for the display and sale of merchandise, and involving stocks of goods, wares or merchandise, incidental to such purposes and accessible to the public.
R-1	310.1	Hotels and apartment houses, congregate residences (each accommodating more than 10 persons).
R-2.1		*Residential care facilities for the elderly (each accommodating more than six nonambulatory clients).*
R-2.2		*Residential care facilities for the elderly (each accommodating more than six ambulatory clients).*
R-2.1.1		*Residential care facilities for the elderly (each accommodating six or less nonambulatory clients).*
R-2.2.1		*Residential care facilities for the elderly (each accommodating six or less ambulatory clients).*
R-2.3		*Residential-based licensed facilities providing hospice care throughout, accommodating more than six bedridden clients.*
R-2.3.1		*Residential-based licensed facilities providing hospice care throughout, accommodating six or less bedridden clients.*
R-3		Dwellings, lodging houses, congregate residences (each accommodating 10 or fewer persons).
S-1	311.1	Moderate-hazard storage occupancies including buildings or portions of buildings used for storage of combustible materials not classified as Group S, Division 2 or Group H Occupancies.
S-2		Low-hazard storage occupancies including buildings or portions of buildings used for storage of noncombustible materials.
S-3		Repair garages where work is limited to exchange of parts and maintenance not requiring open flame or welding, and parking garages not classified as Group S, Division 4 Occupancies.
S-4		Open parking garages.
S-5		Aircraft hangars and helistops.
U-1	312.1	Private garages, carports, sheds and agricultural buildings.
U-2		Fences over 6 feet (1829 mm) high, tanks and towers.

Source: *California Building Code* (2001), Table 3-A

Appendix E
Sample Implementation Documents



APPENDIX E
Sample Implementation Documents

The responsibility for implementation of the policies set forth in the compatibility plans adopted by airport land use commissions rests largely with the affected local jurisdictions. Implementation tools fall into the categories of notification and regulation. The state requires certain notification requirements effective January 1, 2004 (as a result of Assembly Bill 2776). Additional notification, in the form of a recorded deed notice, may also be appropriate. Regulation may take the form of individual property restrictions (avigation easements) or additional development controls in areas within the vicinity of an airport (an airport combining zone ordinance).

Required Notification—State law requires any person who intends to offer subdivided lands within California for sale or lease to file with the Department of Real Estate an application for a public report consisting of a notice of intention and a completed questionnaire. The notice shall include, for property within an AIA to include the following notice:

> NOTICE OF AIRPORT IN VICINITY
>
> This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

Recorded Deed Notice—Deed notices are a form of buyer awareness measure whose objective is to ensure that prospective buyers of airport area property, particularly residential property, are informed about the airport's impact on the property. Unlike easements, deed notices do not convey property rights from the property owner to the airport and do not restrict the height of objects. They only document the existence of certain conditions which affect the property—such as the proximity of the airport and common occurrence of aircraft overflights at or below the airport traffic pattern altitude. ALUCs may make recording of deed notices a requirement for project approval within portions of the airport influence area where avigation easements are not essential. Included in this Appendix is sample of a deed notice (from the California Airport Land Use Planning Handbook, 2002).

Avigation Easement—Avigation easements transfer certain property rights from the owner of the underlying property to the owner of an airport. ALUCs may require avigation easement dedication as a condition for approval of development on property subject to high noise levels or a need to restrict heights of structures and trees to less than what might ordinarily occur on the property. Also, airports may require avigation easements in conjunction with programs for noise insulation of existing structures in the airport vicinity. Included in this Appendix is a sample avigation easement (from the California Airport Land Use Planning Handbook, 2002).

Airport Combining Zone Ordinance—An additional type of implementation document available to local jurisdictions is an airport combining zone ordinance. Possible components for such an ordinance are described in Table E-1.

TABLE E-1
POSSIBLE AIRPORT COMBINING ZONE COMPONENTS

An airport compatibility combining zoning ordinance might include some or all of the following components:

- **Airspace Protection**—A combining district can establish restrictions on the height of buildings, antennas, trees, and other objects as necessary to protect the airspace needed for operation of the airport. These restrictions should be based upon the current version of Federal Aviation Regulations (FAR) Part 77, Objects Affecting Navigable Airspace, Subpart C. Additions or adjustment to take into account instrument approach (TERPS) surfaces should be made as necessary. Provisions prohibiting smoke, glare, bird attractions, and other hazards to flight should also be included.

- **FAA Notification Requirements**—Combining districts also can be used to ensure that project developers are informed about the need for compliance with the notification requirements of FAR Part 77. Subpart B of the regulations requires that the proponent of any project which exceeds a specified set of height criteria submit a Notice of Proposed Construction or Alteration (Form 7460-1) to the Federal Aviation Administration prior to commencement of construction. The height criteria associated with this notification requirement are lower than those spelled out in Part 77, Subpart C, which define airspace obstructions. The purpose of the notification is to determine if the proposed construction would constitute a potential hazard or obstruction to flight. Notification is not required for proposed structures that would be shielded by existing structures or by natural terrain of equal or greater height, where it is obvious that the proposal would not adversely affect air safety.

- **Maximum Densities/Intensities**—Airport noise and safety compatibility criteria are frequently expressed in terms of dwelling units per acre for residential uses and people per acre for other land uses. These standards can either be directly included in a combining zone or used to modify the underlying land use designations. For residential land uses, the correlation between the compatibility criteria and land use designations is direct. For other land uses, the method of calculating the intensity limitations needs to be defined. Alternatively, a matrix can be established indicating whether each specific type of land use is compatible with each compatibility zone. To be useful, the land use categories need to be more detailed than typically provided by general plan or zoning ordinance land use designations.

- **Open Areas for Emergency Landing of Aircraft**—In most circumstances in which an accident involving a small aircraft occurs near an airport, the aircraft is under control as it descends. When forced to make an off-airport emergency landing, pilots will usually attempt to do so in the most open area readily available. To enhance safety both for people on the ground and the occupants of aircraft, airport compatibility plans often contain criteria requiring a certain amount of open land near airports. These criteria are most effectively carried out by planning at the general or specific plan level, but may also need to be included in a combining district so that they will be applied to development of large parcels. Adequate open areas can often be provided by clustering of development on adjacent land.

TABLE E-1
POSSIBLE AIRPORT COMBINING ZONE COMPONENTS

An airport compatibility combining zoning ordinance might include some or all of the following components:

- **State Regulation of Obstructions**—State law prohibits anyone from constructing or altering a structure or permitting an object of natural growth to exceed the heights established by FAR Part 77, Subpart C, unless the FAA has determined the object would not or does not constitute a hazard to air navigation (Public Utilities Code, Section 21659). Additionally, a permit from the Department of Transportation is required for any structure taller than 500 feet above the ground unless the height is reviewed and approved by the Federal Communications Commission or the FAA (Section 21656).
- **Designation of High Noise-Impact Areas**—California state statutes require that multi-family residential structures in high-noise exposure areas be constructed so as to limit the interior noise to a Community Noise Equivalent Level of no more than 45 dB. A combining district could be used to indicate the locations where special construction techniques may be necessary in order to ensure compliance with this requirement. The combining district also could extend this criterion to single-family dwellings.
- **Areas of Special Compatibility Concern**—A significant drawback of standard general plan and zoning ordinance land use designations is that they can be changed. Uses that are currently compatible are not assured of staying that way in the future. Designation of areas of special compatibility concern would serve as a reminder that airport impacts should be carefully considered in any decision to change the existing land use designation. [A legal consideration which supports the value of this concept is that down-zoning of a property to a less intensive use is becoming more difficult. It is much better not to have inappropriately up-zoned the property in the first place.]
- **Real Estate Disclosure Policies**—The geographic extent and specific language of recommended real estate disclosure statements can be described in an airport combining zone ordinance.

Sample Avigation Easement

This indenture made this _____ day of _____, 20___, between_____ herein after referred to as Grantor, and the [Insert County or City name], a political subdivision in the State of California, hereinafter referred to as Grantee. The Grantor, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, does hereby grant to the Grantee, its successors and assigns, a perpetual and assignable easement over the following described parcel of land in which the Grantor holds a fee simple estate. The property which is subject to this easement is depicted as _____ on "Exhibit A" attached and is more particularly described as follows:

[Insert legal description of real property] The easement applies to the Airspace above an imaginary plane over the real property. The plane is described as follows:

The imaginary plane above the hereinbefore described real property, as such plane is defined by Part 77 of the Federal Aviation Regulations, and consists of a plane [describe approach, transition, or horizontal surface]; the elevation of said plane being based upon the _____ Airport official runway end elevation of _____ feet Above Mean Sea Level (AMSL), as determined by [Insert name and Date of Survey or Airport Layout Plan that determines the elevation] the approximate dimensions of which said plane are described and shown on Exhibit A attached hereto and incorporated herein by reference.

The aforesaid easement and right-of-way includes, but is not limited to:

1) For the use and benefit of the public, the easement and continuing right to fly, or cause or permit the flight by any and all persons, or any aircraft, of any and all kinds now or hereafter known, in, through, across, or about any portion of the Airspace hereinabove described; and

2) The easement and right to cause or create, or permit or allow to be caused or created within all space above the existing surface of the hereinabove described real property and any and all Airspace laterally adjacent to said real property, such noise, vibration, currents and other effects of air, illumination, and fuel consumption as may be inherent in, or may arise or occur from or during the operation of aircraft of any and all kinds, now or hereafter known or used, for navigation of or flight in air; and

3) A continuing right to clear and keep clear from the Airspace any portions of buildings, structures, or improvements of any kinds, and of trees or other objects, including the right to remove or demolish those portions of such buildings, structures, improvements, trees, or other things which extend into or above said Airspace, and the right to cut to the ground level and remove, any trees which extend into or above the Airspace; and

4) The right to mark and light, or cause or require to be marked or lighted, as obstructions to air navigation, any and all buildings, structures, or other improvements, and trees or other objects, which extend into or above the Airspace; and

5) The right of ingress to, passage within, and egress from the hereinabove described real property, for the purposes described in subparagraphs (3) and (4) above at reasonable times and after reasonable notice.

For and on behalf of itself, its successors and assigns, the Grantor hereby covenants with the [Insert County or City name], for the direct benefit of the real property constituting the _____ Airport hereinafter described, that neither the Grantor, nor its successors in interest or assigns will construct, install, erect, place or grow in or upon the hereinabove described real property, nor will they permit to allow, any building structure, improvement, tree or other object which extends into or above the Airspace, or which constitutes an obstruction to air navigation, or which obstructs or interferes with the use of the easement and rights-of-way herein granted.

The easements and rights-of-way herein granted shall be deemed both appurtenant to and for the direct benefit of that real property which constitutes the _____ Airport, in the [Insert County or City name], State of California; and shall further be deemed in gross, being conveyed to the Grantee for the benefit of the Grantee and any and all members of the general public who may use said easement or right-of-way, in landing at, taking off from or operating such aircraft in or about the _____ Airport, or in otherwise flying through said Airspace.

Grantor, together with its successors in interest and assigns, hereby waives its right to legal action against Grantee, its successors, or assigns for monetary damages or other redress due to impacts, as described in Paragraph (2) of the granted rights of easement, associated with aircraft operations in

the air or on the ground at the airport, including future increases in the volume or changes in location of said operations. Furthermore, Grantor, its successors, and assigns shall have no duty to avoid or mitigate such damages through physical modification of airport facilities or establishment or modification of aircraft operational procedures or restrictions. However, this waiver shall not apply if the airport role or character of its usage (as identified in an adopted airport master plan, for example) changes in a fundamental manner which could not reasonably have been anticipated at the time of the granting of this easement and which results in a substantial increase in the impacts associated with aircraft operations. Also, this grant of easement shall not operate to deprive the Grantor, its successors or assigns, of any rights which may from time to time have against any air carrier or private operator for negligent or unlawful operation of aircraft.

These covenants and agreements run with the land and are binding upon the heirs, administrators, executors, successors and assigns of the Grantor, and, for the purpose of this instrument, the real property firstly hereinabove described is the servient tenement and said _____ Airport is the dominant tenement.

DATED: _____
STATE OF:
COUNTY OF:

On _____, before me, the undersigned, a Notary Public in and for said County and State, personally appeared _____, and _____ known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same.

WITNESS my hand and official seal.

_____
Notary Public

Sample Deed Notice

A statement similar to the following should be included on the deed for any real property subject to the deed notice requirements set forth in the [Insert ALUC name] *Airport Land Use Compatibility Plan*. Such notice should be recorded by the county of [Insert County name]. Also, this deed notice should be included on any parcel map, tentative map, or final map for subdivision approval.

The *Alameda County Airport Land Use Compatibility Plan* and [Insert County/City name] Ordinance (Ordinance No. _____) identify a [Insert Airport name] Airport Influence Area. Properties within this area are routinely subject to overflights by aircraft using this public-use airport and, as a result, residents may experience inconvenience, annoyance, or discomfort arising from the noise of such operations. State law (Public Utilities Code Section 21670 et seq.)

establishes the importance of public-use airports to protection of the public interest of the people of the state of California. Residents of property near such airports should therefore be prepared to accept the inconvenience, annoyance, or discomfort from normal aircraft operations. Residents also should be aware that the current volume of aircraft activity may increase in the future in response to Alameda County population and economic growth. Any subsequent deed conveying this parcel or subdivisions thereof shall contain a statement in substantially this form.

Appendix F
Consistency Checklist



APPENDIX F
Consistency Checklist

Introduction

One of the fundamental responsibilities assigned to ALUCs by the Aeronautics Act is to review particular types of local actions for compliance with the criteria and policies set forth in the commissions' adopted compatibility plans. The law specifies that local jurisdictions must refer certain actions to the ALUC for review. Actions included in this category are proposed adoption or amendment of general plans, specific plans, zoning ordinances, and building regulations affecting land within an AIA. Also required to be submitted for ALUC review are several types of airport and heliport development plans. Referral of other local actions – primarily individual development projects – is required in some instances, but voluntary in others.

The following checklist is intended to assist local jurisdictions with modifications necessary to make their general plans and other local policies consistent with the ALUC's compatibility plan. It is also designed to facilitate ALUC reviews of these local plans and policies. For more information on the review process of local land use actions, please refer to chapters 4 and 5 of the *California Airport Land Use Planning Handbook* (Caltrans, 2002).

Consistency Checklist

General and Specific Plan Documents

The following items typically appear directly in a general or specific plan. Amendment of these types of documents will be required if there are any conflicts with the ALUCP.

Land Use Map – No direct conflicts should exist between proposed new land uses indicated on a general plan land use map and the ALUC land use compatibility criteria.

- □ Residential densities (dwelling units per acre) should not exceed the set limits. Differences between gross and net densities and the potential for secondary dwellings on single parcels may need to be taken into account.
- □ Proposed nonresidential development needs to be assessed with respect to applicable intensity limits.
- □ No new land uses of a type listed as specifically prohibited should be shown within affected areas.

Noise Element – General plan noise elements typically include criteria indicating the maximum noise exposure for which residential development is normally acceptable. Note, however, that a general plan may establish a different limit with respect to aviation-related noise than for noise from other sources (this may be appropriate in that aviation-related noise is often judged to be more objectionable than other types of equally loud noises).

- □ This limit must be made consistent with the equivalent compatibility plan criteria.

Zoning or Other Policy Documents

The following items need to be reflected either in the general plan or in a separate policy document such as a combining zone ordinance. If a separate policy document is adopted, modification of the general plan to achieve consistency with the compatibility plan may not be required. Modifications would normally be needed only to eliminate any conflicting language which may be present and to make reference to the separate policy document.

- □ **Secondary Dwellings** – detached secondary dwellings on the same parcel should be counted as additional dwellings for the purposes of density calculations. This factor needs to be reflected in local policies either by adjusting the maximum allowable densities or by prohibiting secondary dwellings where their presence would conflict with the compatibility criteria.
- □ **Intensity Limitations on Nonresidential Uses** – Local policies must be established to limit the usage intensities of commercial, industrial, and other nonresidential land uses. This can be done by duplication of the performance-oriented criteria – specifically, the number of people per acre – indicated in the compatibility plan. Alternatively, local jurisdictions may create a detailed list of land uses which are allowable and/or not allowable within each compatibility zone. For certain land uses, such a list may need to

include limits on building sizes, floor area ratios, habitable floors, and/or other design parameters which are equivalent to the usage intensity criteria.

- □ **Identification of Prohibited Uses** – Compatibility plans may prohibit day care centers, hospitals, and certain other uses within much of an airport's influence area. The facilities often are permitted or conditionally permitted uses within many commercial or industrial land use designations. Policies need to be established which preclude these uses in accordance with the compatibility criteria.
- □ **Open Land Requirements** – Compatibility plan requirements, if any, for assuring that a minimum amount of open land is preserved in the airport vicinity must be reflected in local policies. Normally, the locations which are intended to be maintained as open land would be identified on a map with the total acreage within each compatibility zone indicated. If some of the area included as open land is private property, then policies must be established which assure that the open land will continue to exist as the property develops. Policies specifying the required characteristics of eligible open land also must be established.
- □ **Infill development** – If a compatibility plan contains infill policies and a jurisdiction wishes to take advantage of them, the lands which meet the qualifications must be shown on a map.
- □ **Height Limitations and Other Hazards to Flight** – To protect the airport airspace, limitations must be set on the height of structures and other objects near airports. These limitations are to be based upon Part 77 of the Federal Aviation Regulations, but may include exceptions for objects on high terrain if provided for in the ALUCP. Restrictions also must be established on other land use characteristics which can cause hazards to flight (specifically, visual or electronic interference with navigation and uses which attracted hazardous wildlife). Note that many jurisdictions have already adopted an airport-related hazard and height limit zoning ordinance which, if up to date, will satisfy this consistency requirement.
- □ **Noise Insulation Requirements** – Some compatibility plans call for certain buildings proposed for construction within high noise-impact areas to demonstrate that they will contain sufficient sound insulation to reduce aircraft-related noise to an acceptable level. These criteria apply to new residences, schools, and certain other buildings containing noise-sensitive uses. Local policies must include parallel criteria.
- □ **Buyer Awareness Measures** – As a condition for approval of development within certain compatibility zones, some compatibility plans require either dedication of an avigation easement to the airport proprietor or place on deeds of a notice regarding airport impacts. If so, local jurisdiction policies must contain similar requirements. Compatibility plans also may encourage, but should not require, local jurisdictions to adopt a policy stating that airport proximity and the potential for aircraft overflights be disclosed as part of real estate transactions regarding property in the airport influence area.

- **Nonconforming Uses and Reconstruction** – Local jurisdiction policies regarding nonconforming uses and reconstruction must be equivalent to or more restrictive than those in the ALUCP, if any.

Review Procedures

In addition to incorporation of ALUC compatibility criteria, local jurisdiction implementing documents must specify the manner in which development proposals will be reviewed for consistency with the compatibility criteria.

- **Actions Always Required to be Submitted for ALUC Review** – State law specifies which types of development actions must be submitted for ALUC review. Local policies should either list these actions or, at a minimum, not the jurisdiction's intent to comply with the state statute.
- **Other Land Use Actions Potentially Subject to ALUC Review** – In addition to the above actions, the compatibility plan may identify certain major land use actions for which referral to the ALUC is dependent upon agreement between the jurisdiction and the ALUC. If the jurisdiction fully complies with all of the items in this general plan consistency checklist or has taken the necessary steps to overrule the ALUC, then referral of the additional actions is voluntary. On the other hand, a jurisdiction may elect not to incorporate all of the necessary compatibility criteria and review procedures into its own policies. In this case, referral of major land use actions to the ALUC is mandatory. Local policies should indicate the jurisdiction's intentions in this regard.
- **Process for Compatibility Reviews by Local Jurisdictions** – If a jurisdiction choose to submit only the mandatory actions for ALUC review, then it must establish a policy indicating the procedures which will be used to assure that airport compatibility criteria are addressed during review of other projects. Possibilities include: a standard review procedure checklist which includes reference to compatibility criteria; use of a geographic information system to identify all parcels within the airport influence area; etc.
- **Variance Procedures** – Local procedures for granting of variances to the zoning ordinance must make certain that any such variances do not result in a conflict with the compatibility criteria. Any variance which involves issues of noise, safety, airspace protection, or overflight compatibility as addressed in the compatibility plan must be referred to the ALUC for review.
- **Enforcement** – Policies must be established to assure compliance with compatibility criteria during the lifetime of the development. Enforcement procedures are especially necessary with regard to limitations on usage intensities and the heights of objects. An airport combining district zoning ordinance is one means of implementing enforcement requirements.

Appendix G
Heliport Design

ESA

APPENDIX G
Heliport Design

As described in Table 2-1 "Heliports in Alameda County", one public- and several private-use airports operate to support private, business, and medical uses. Proposals to enhance, modify, or deactivate these facilities is subject to ALUC review.

FAA Advisory Circular (AC) 150/5390-2B, "Heliport Design," provides recommendations for heliport design and describes the federal requirements associated with heliport development. The AC applies to any proposal to construct, activate, or deactivate a heliport. Although the AC only constitutes a regulation when Federal funds are used, Alameda County encourages those with heliport proposals to implement the guidance set forth in the AC to the greatest extent practicable.

FAA AC 150/5390-2B provides detailed data concerning heliport and helipad design, such as:

- Physical, technical, and public interest matters that should be considered in the planning and establishment of a heliport;
- Descriptions pertaining to appropriate or optimum locations for heliports;
- Terminology and pertinent terms associated with heliports;
- Design standards relevant to developing heliport facilities that support general aviation, transport, and hospitals, including diagrams;
- Gradient and pavement design; and
- Dimensional data, markings, etc.

FAA recommends that the standards presented in the AC should be used in planning and designing improvements to existing facilities or whenever a significant expansion or reconstruction project is undertaken. The complete AC is available at www.faa.gov in several files that can be downloaded upon request. The cover memorandum describing the AC is included in this Appendix. The most recent version of the AC is available from the FAA website at: www.faa.gov.

U.S. Department
of Transportation

Federal Aviation
Administration

Advisory Circular

Subject: HELIPORT DESIGN | Date: 09/30/04 | AC No: 150/5390-2B
Initiated by: AAS-100 | Change:

1. PURPOSE. This advisory circular (AC) provides recommendations for heliport design and describes acceptable requirements to develop a heliport. This AC applies to anyone who is proposing to construct, activate or deactivate a heliport.

2. APPLICABILITY: This AC is not mandatory and does not constitute a regulation except when Federal funds are specifically dedicated for heliport construction.

3. EFFECTIVE DATE:

4. CANCELLATION. AC 150/5390-2A, *Heliport Design*, dated January 20, 1994, is canceled.

5. EXECUTIVE SUMMARY. The modern helicopter is one of the most versatile transportation vehicles known to man. Typically, a heliport is substantially smaller than an airport providing comparable services. The helicopter has the capability of providing a wide variety of important services to any community that integrates this aircraft into its local transportation system.

a. Service. In addition to their service in the transportation of people, helicopters have proven to be useful to their communities in the following ways:

(1). Disaster Relief. Natural disasters often result in the breakdown of ground transportation systems. Helicopters are able both to bring in response teams and supplies and to evacuate injured people during the critical period before ground transportation is restored.

(2). Air Ambulance Services. For an injured or critically ill person, time is life. Helicopters can provide high-speed, point-to-point transportation without being constrained by the limitations of the ground infrastructure.

(3). Police Services. Many municipalities consider their police services helicopters vital force multipliers in carrying out search and rescue, chase, and surveillance.

(4). Moving High-Value Assets. High-value or time-sensitive cargo, such as canceled checks, and people, including the President of the United States, frequently travel on helicopters because this mode of transportation is fast and flexible. Companies use helicopters as an invaluable part of an in-house transportation system to connect the office with various plants, job sites, and the local airport. Utility companies use helicopters to construct and inspect high-voltage electrical lines and to monitor underground gas transmission lines. The petroleum industry uses helicopters to support exploration and production operations. Newspapers and radio/TV stations use helicopters for onsite news gathering, taking photos, and airborne reporting of rush hour traffic conditions.

b. Facilities. The most effective way for a community to realize the benefits of helicopter services is by developing or permitting the development of places where helicopters can land and take off. While heliports can be large and elaborate, most are not. The basic elements of a heliport are clear approach/ departure paths, a clear area

for ground maneuvers, and a windsock. This minimal facility may be adequate as a private use heliport, and may even suffice as the initial phase in the development of a public use heliport capable of serving the general aviation segment of the helicopter community.

c. Planning. While the heliport itself may be simple, the planning and organization required to properly put one into place can be intimidating. To help make the process easier, the Federal Aviation Administration (FAA) has published this AC. This document describes physical, technical, and public interest matters that should be considered in the planning and establishment of a heliport. While this AC is a technical document intended to help engineers, architects, and city planners' design, locate, and build the most effective heliport, it can be used by anyone considering the construction of a heliport.

d. Location. The optimum location for a heliport is in close proximity to the desired origination and/or destination of the potential users. Industrial, commercial, and business operations in urban locations are demand generators for helicopter services, even though they often compete for the limited ground space available. A site permitting the shared aeronautical and commercial usage is a viable alternative to non-aeronautical use alone. Heliport sites may be adjacent to a river or a lake, a railroad, a freeway, or a highway, all of which offer the potential for multi- functional land usage. These locations also have the advantage of relatively unobstructed airspace, which can be further protected from unwanted encroachment by properly enacted zoning. As vertical flight transportation becomes more prevalent, requirements for scheduled "airline type" passenger services will necessitate the development of an instrument procedure to permit "all-weather" service.

e. AC Organization. This AC is structured to provide communities and persons intending to develop a heliport, or become involved in regulating helicopter facilities, with general guidance on heliport requirements. The AC is organized with separate chapters covering general aviation heliports, transport heliports, and hospital heliports based on the functional role of the heliport.

(1). A heliport proponent should be familiar with the terminology used in this specialized field. Chapter 1 defines pertinent terms used in the industry and identifies actions common to developing a heliport.

(2). General aviation heliports are normally privately owned although they can be publicly owned. Design standards relevant to developing a general aviation heliport are found in Chapter 2.

(3). Transport heliports are developed to provide the community with a full range of vertical flight services including scheduled service by air carriers (airlines) using helicopters. When the heliport serves any scheduled or unscheduled passenger operation of an air carrier that is conducted with an aircraft having a seating capacity of more than 30 passengers, the heliport is required to be certificated by the FAA in accordance with 14 Code of Federal Regulations (CFR) Part 139, Certification and Operations: Land Airports Serving Certain Air Carriers. In any event, a transport heliport would also accommodate corporate users and local air taxi operators. This broad spectrum of activities frequently requires a more extensive airside and landside infrastructure with the potential capability to operate in instrument meteorological conditions. Not withstanding these requirements, a community's investment in a heliport may be substantially less than the investment required for an airport providing comparable services. Design standards relevant to developing a transport heliport are found in Chapter 3.

(4). Hospital heliports are treated as special cases of general aviation facilities providing a unique public service. They are normally located in close proximity to the hospital emergency room or a medical facility. Design recommendations relevant to developing a hospital heliport are found in Chapter 4.

(5). When there are a significant number of helicopter operations on an airport, it may be prudent to consider developing separate facilities specifically for helicopter use. Chapter 5 addresses helicopter facilities on airports.

(6). With the introduction of the global positioning system (GPS), it is now practical for heliports to have instrument approaches. Good planning suggests that heliport proponents should plan for the eventual development of instrument approaches to their heliports. Chapters 6 and 7 contain recommendations to be considered in contemplating future instrument operations at a heliport. It is wise to consider these issues during site selection and design.

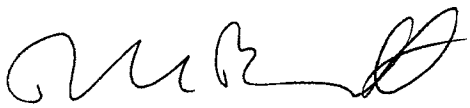
(7). Chapter 8 addresses heliport gradients and pavement design issues.

(8). The appendices provide helicopter dimensional data, addresses of aviation organizations, form and proportions of certain heliport markings, and acronyms.

6. APPLICATION. The recommendations and standards in this AC are for planning and designing civil heliports. To the extent that it is feasible and practical to do so, the standards in this AC should be used in planning and designing improvements to an existing facility when significant expansion or reconstruction is undertaken. Conformity with these standards is a prerequisite to Federal grant-in-aid assistance. Modification to a heliport design standard related to new construction, expansion, reconstruction, or upgrade on a heliport that received Federal aid requires FAA approval. The request for modification should show that the modification will provide an acceptable level of safety, economy, durability, and workmanship. The recommendations and standards in this AC are not intended to be sufficient to design an instrument approach procedure.

NOTE: *If tiltrotor operations are contemplated, criteria in AC 150/5390-3, Vertiport Design are applicable.*

7. METRIC UNITS. To promote an orderly transition to metric units, this AC includes both English and metric dimensions. The metric conversions may not be exact equivalents, and until there is an official changeover to the metric system, the English dimensions will govern.



DAVID L. BENNETT
Director of Airport Safety and Standards

Appendix H
Glossary



APPENDIX H
Glossary

Air carrier: An operator that:

1. performs at least five round trips per week between two or more points and publishes flight schedules which specify the times, days of the week and places between which such flights are performed; or

2. transport mail by air pursuant to a current contract with the United States Postal Service.

Air carriers are certified in accordance with Federal Aviation Regulations (FAR) Parts 121 and 127.

Air charter: An air carrier certified in accordance with FAR Part 135 and authorized to provide, on demand, public transportation of persons and property by aircraft. Air charters generally operate small aircraft "for hire" for specific trips.

Air taxi: See air charter.

Air traffic control: A term used to denote a number of different types of facilities which are operated by or under the auspices of the Federal Aviation Administration and which provide informational, navigational, and collision avoidance services to aircraft in flight. Air traffic control towers and air route traffic control centers are elements of the air traffic control system.

Air traffic control tower (ATCT) ("tower"): A facility located within the physical boundaries of certain airports and consisting of a tower which provides visual and/or radar tracking, ground-to-air radio communications, traffic management, and limited informational, navigational, and separation services to aircraft operating in the immediate vicinity of an airport.

Air route traffic control center (ARTCC): A facility which provides radar tracking and informational, navigational, and separation services to aircraft operating beyond the immediate vicinity of an airport.

Airport Operation: A take off or a landing.

Angle of descent: The angle, with respect to a horizontal plane, of the flight path of an aircraft descending from a higher altitude to a lower altitude (usually expressed in degrees or in feet per nautical mile). Also referred to as **descent slope**.

Approach angle: The angle, with respect to a horizontal plane, of the flight path of an aircraft descending to land at an airport (usually expressed in degrees or in feet per nautical mile). Also referred to as **approach slope**.

Approach lighting system (ALS): An airport lighting system which, by means of a standardized array of lights on the ground provides visual cues which enable pilots or aircraft approaching the runway in conditions of darkness or poor visibility, to align the flight path of the aircraft with the extended centerline of the runway.

Banks: As employed in the Land Use Matrix and other sections of this ALUP, the term "banks" shall encompass any land use whereby some or all of the financial services customarily provided by banking institutions are offered to the general public. Examples include traditional banks, savings and loan associations, and credit unions. The provision of banking services at a site, which is predominantly devoted to a compatible use (e.g., in-store supermarket bank branches, automated teller machines), however, shall not be considered as banks in the context of this ALUP.

Base leg: A segment of the standard airport traffic pattern which extends at right angles from the extended runway centerline at some distance from the approach end of the runway. The base leg extends from the downwind leg of the traffic pattern to the final approach course (extended runway centerline) and is flown in the direction toward the runway centerline. The altitude of aircraft flying the base leg is usually between 1000 and 400 feet above ground level.

Religious Facilities: As employed in the Land Use Matrix and other sections of this ALUP, the term "churches" shall denote any land use devoted exclusively or primarily to religious worship. Classrooms and/or meeting rooms may be included as part of a church if sufficient conditions are placed upon the development to ensure that such facilities will be utilized only for religious instruction or church-related meetings and that their use for such purposes will remain subsidiary to the primary activity of religious worship. In the absence of such conditions, classroom facilities which would be suitable for regular religious or non-religious education of students will be considered a school.

Circle-to-Land Procedure: A series of standardized aerial procedures which enable aircraft which have completed an instrument approach intended to culminate in a landing on a specified runway to maneuver for landing on a different runway than specified in the basic instrument approach while maintaining visual contact with the airport.

Climb gradient: The angle, with respect to a horizontal plane, of the flight path of an aircraft ascending from a lower altitude to a higher altitude (usually expressed in feet per nautical mile).

Closed traffic: An airborne maneuver by which an aircraft takes off from and lands at an airport without leaving the immediate airport vicinity (usually performed as a flight training or practice maneuver) or the airport traffic pattern flown by such an aircraft.

Community noise equivalent level (CNEL): A measure, in decibels, of the cumulative noise exposure at a given site. The CNEL mathematically increases the significance of noise events occurring during evening and nighttime hours, in response to the widely-held assumptions that such events are more intrusive than similar events occurring during daytime hours.

Compatible: A designation employed within the Land Use Matrix (Table 2-2) to denote that a proposed land use is not prohibited or restricted by the Land Use Matrix within the specified zone.

Consistent: A determination made by the ALUC when a referral meets the conditions outlined in the ALUP.

Crosswind departure: A VFR departure procedure in which an aircraft exits the airport area by extension of the crosswind leg of the traffic pattern.

Crosswind leg: A segment of the standard airport traffic pattern which extends at right angles from the extended runway centerline at some distance from the departure end of the runway. The base leg extends from the upwind leg of the traffic pattern to the downwind leg and is flown in the direction away from runway centerline.

Course Deviation Indicator (CDI): An instrument commonly installed in aircraft and utilized for aerial navigation, which depicts the location, in the horizontal plane, of the aircraft relative the intended direction of flight.

Decibel (dB): A unit for expressing the relative intensity of sounds on a scale of zero for the average least perceptible sound to about 130 for the average pain level.

Decision altitude (DA): The minimum altitude above mean sea level to which an aircraft operating according to a precision instrument approach may descend without visual contact with the airport or the airport environs.

Decision height (DH): The minimum vertical distance above the height of the intended landing zone to which an aircraft operating according to a precision instrument approach may descend without visual contact with the airport or the airport environs.

Density of Land Use: The number of people a development can attract per acre.

Density of Residential Development: The number of dwelling units per acre in a development or proposed development.

Departure Procedure (DP): See **instrument departure procedure**.

Descent slope: The angle, with respect to a horizontal plane, of the flight path of an aircraft descending from a higher altitude to a lower altitude (usually expressed in degrees or in feet per nautical mile). Also referred to as **angle of descent**.

Distance Measuring Equipment (DME): An apparatus, consisting of a ground-based radio transmitter and a specialized airborne receiver, which provides information regarding the slant-range distance of an aircraft from the ground-based facility. Also, by extension, any airborne maneuver, course, or flight path which is determined through the application of DME information.

Downwind departure: A VFR departure procedure in which an aircraft exits the airport area by extension of the downwind leg of the traffic pattern.

Downwind leg: A segment of the standard airport traffic pattern which is parallel to the runway of intended landing, is usually between 1/2 and 1 1/2 miles lateral to the runway, and is flown in a direction opposite to the direction of intended landing. The downwind leg is, in most instances, is the initial leg of the traffic pattern for landing aircraft. The altitude of aircraft flying the base leg is usually between 1000 and 800 feet above ground level.

Emergency Aircraft Landing Site: Any area of usable space which is at least 300 feet in length and 75 feet in width and which is oriented in such manner that its long axis is approximately parallel to the most frequently used adjacent flight path or paths.

Enplaned passengers: The total number of revenue-producing passengers boarding aircraft, including originating, stopover, and transfer passengers, in scheduled and nonscheduled services.

Fixed base operator (FBO): A provider of support services to users of an airport. Such services include fueling, hangaring, flight training, repair, maintenance, and other services.

General aviation: That portion of civil aviation which encompasses all facets of aviation except air carriers and air charters.

Glide slope: An apparatus which provides, by means of radio signals or light signals, vertical guidance to aircraft approaching to land, or (by extension) the vertical flight path flown by aircraft receiving guidance from such a system.

Global positioning system (GPS): A navigational aid which determines the position, direction of flight, speed, and (to a limited extent) altitude of an aircraft by means of signals received from a constellation of earth-orbiting satellites.

Global positioning system (GPS) approach: A series of standardized, predetermined, and published aerial maneuvers which are based on navigational data received from earth-orbiting satellites and which enable aircraft to descend toward an airport with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information. A typical GPS approach permits aircraft to descend to within 400-500 feet of the surface solely on the basis of satellite navigation aids.

Global positioning system (GPS) overlay: An FAA designation applied to certain instrument approach procedures originally designed to be executed by reference to ground-based navigational aids which authorizes pilots to perform the approach solely by reference to navigational information provided by earth-orbiting GPS satellites.

Gross Area or Gross Acreage: For the purposes of this ALUP, the terms *gross area* and *gross acreage* will be considered interchangeable, and will be considered to indicate a measurement of the entire size of the site, parcel, intended use, or zone specified by a referral to the ALUC.

Hospitals: As employed in the Land Use Matrix and other sections of the ALUP, the term "hospitals" shall encompass any facility other than a private physician's office or outpatient clinic, in which care is offered to individuals who exhibit physical, emotional, or mental disability or illness. Examples include acute care hospitals, freestanding emergency rooms, nursing homes, board-and-care facilities, birthing centers, mental institutions, and rehabilitation centers.

Hotels & Motels: For purposes of the Land Use Matrix and other sections of the ALUP, the term "hotels & motels" shall denote any structure or facility intended or suitable for short-term occupancy by persons as a temporary dwelling. Examples of this type of land use include hotels, motels, bed and breakfast inns, youth hostels, pensions, and temporary shelters.

Inconsistent: A determination made by the ALUC when a proposed local action does not meet the conditions outlined in the ALUP.

Instrument approach: A series of standardized, predetermined, and published aerial maneuvers which are based on navigational data received from ground-based navigational aids or satellites and which enable aircraft to descend toward an airport with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information.

Instrument departure procedure (DP): A series of standardized, predetermined, and published aerial maneuvers which are based on navigational data received from ground-based navigational aids or satellites and which enable aircraft to depart from an airport when meteorologic conditions are such that a safe departure cannot be made solely through the use of visual information. Formerly known as a **standard instrument departure (SID)**.

Instrument flight rules (IFR): A set of FAA rules, regulations, and procedures which define flight operations under conditions which do not permit navigation by means of visual information alone. Also employed as an adjective to designate a flight plan which will enable an aircraft to operate under conditions which preclude navigation by means of visual information.

Instrument landing system (ILS): A precision instrument approach system which provides aircraft with both vertical (glideslope) and lateral guidance by means of radio signals transmitted from installations within the physical boundaries of the airport.

Instrument landing system (ILS) approach: A series of standardized, predetermined, and published aerial maneuvers which are based on vertical and lateral navigational data received from radio transmitters located within the physical boundaries of the airport and which enable aircraft to descend toward an airport with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information. A typical ILS approach permits aircraft to descend to within 200 feet of the surface.

Instrument meteorologic conditions (IMC): Weather conditions specified in FAA regulations under which aircraft are not authorized to takeoff, land, or maneuver under visual flight rules and may operate only by reference to electronic aids to navigation. The visibility and cloud clearance requirements for IMC are determined by the airspace designation in which and aircraft is operating, by the aircraft's altitude above both sea level and ground level, and by whether the aircraft is operating in daylight or at night.

Localizer (LOC): An apparatus which provides, by means of radio signals from a transmitter located within the physical boundaries of an airport and a specialized airborne receiver, lateral course guidance for aircraft descending to land.

Localizer approach: A series of standardized, predetermined, and published aerial maneuvers which are based on lateral guidance information received by means of a localizer transmitter located within the physical boundaries of an airport and which enable aircraft to descend toward an airport with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information. Localizer approaches do not provide vertical guidance, but localizers are often coupled with glide slope transmitters. A typical localizer approach permits aircraft to descend to within 400-500 feet of the surface solely on the basis of radio navigation aids.

Localizer-type directional array (LDA): A type of apparatus which provides, by means of radio signals from a transmitter located within the physical boundaries of an airport and a specialized airborne receiver, lateral course guidance for aircraft descending to land. The primary distinction between an LOC and an LDA is that the final approach course provided by the LDA is not aligned with the runway centerline. Glide slope information is never provided in conjunction with an LDA.

Localizer-type directional array (LDA) approach: A series of standardized, predetermined, and published aerial maneuvers which are based on lateral guidance information received by means of an LDA transmitter located within the physical boundaries of an airport and which enable aircraft to descend toward an airport with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information.

Minimum descent altitude (MDA): The minimum altitude above mean sea level to which an aircraft operating according to a non-precision instrument approach may descend without visual contact with the airport or the airport environs.

Minimum descent height (MDH): The minimum vertical distance above the height of the intended landing zone to which an aircraft operating according to a non-precision instrument approach may descend without visual contact with the airport or the airport environs.

Missed approach: An instrument approach which does not terminate in a landing. Usual reasons for a missed approach include failure to establish visual contact with the airport environs at the completion of an instrument approach, loss of course guidance, or instructions from air traffic control.

Missed approach course: A standardized, predetermined, and published flight path to be flown in the event of a missed approach.

Multifamily residential (land use): Any project, development, or other land use in which separate families or individuals occupy dwelling units which share a common wall or a common roof, or occupy a common legal parcel of real estate. Examples include duplexes, triplexes, quadriplexes, apartment buildings, condominiums, townhouses, and residential courts. In addition, institutional uses such as hospitals, nursing homes, board and care facilities, correctional institutions, and boarding schools, which entail the long-term occupancy of a single-structure by unrelated individuals will be considered to be multifamily residential in nature.

Nautical mile (nm): a measure of distance equal to 6076.115 feet (1852 meters).

Non-directional beacon (NDB): A radio beacon which transmits signals which do not contain encoded directional information, but which can be used for as a "homing" signal for aircraft tracking to or away from the transmitter.

Non-directional beacon (NDB) approach: A series of standardized, predetermined, and published aerial maneuvers which are based on lateral guidance information received by means of an NDB transmitter located either at or remote from an airport and which enable aircraft to descend with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information.

Non-precision instrument approach procedure: An instrument approach procedure for which vertical guidance is not provided. Common types of non-precision instrument approach procedures include VOR, GPS, localizer, NDB, and LDA.

Office buildings: As employed in the Land Use Matrix and other sections of the ALUP, the term "office buildings" shall encompass any development, regardless of structure size, which includes significant floor space suitable for use by personnel performing or providing clerical, professional, or financial services as a primary use. The presence of limited office space for support of another primary function which is consistent with the ALUP, however, is not considered an "office building" under this definition.

Open Space: Land which is substantially free of structures, vehicles, and trees, which is relatively smooth and level, and which is devoted to use characterized by low occupancy levels.

Operation: A takeoff or landing

Precision instrument approach procedure: An instrument approach procedure for which vertical guidance is provided. ILS is the only common type of precision instrument approach currently in use. In the near future, certain GPS approaches will be upgraded to provide vertical guidance information, as well.

Prohibited: A determination made by the ALUC when a proposed local action does not meet the criteria set forth in the Land Use Matrix.

Public buildings: For purposes of the Land Use Matrix and other sections of the ALUP, the term "public buildings" shall be taken to mean structures which are utilized by government or social agencies for the provision of services to the public. Examples of such uses would include post offices, police or fire stations, and offices and agencies of local, state, or federal government.

Rate of climb: The vertical speed or rate of change in altitude of an aircraft ascending from a lower altitude to a higher altitude (usually expressed in feet per minute).

Rate of descent: The vertical speed or rate of change in altitude of an aircraft descending from a higher altitude to a lower altitude (usually expressed in feet per minute).

Rural residential (land use): As employed in the Land Use Matrix and other sections of the ALUP, the term "rural residential" indicates use of land for dwellings in such manner that no more than one primary dwelling unit is developed per five acres of property.

Single-family residential (land use): As employed in the Land Use Matrix and other sections of the ALUP, the term "single-family residential" indicates use of land for dwellings in such manner that no more than one primary dwelling unit is developed on each legal parcel and the size of each legal parcel is less than one acre.

Schools, colleges, and universities: For purposes of the Land Use Matrix and other sections of the ALUP, the term "schools, colleges, and universities" shall be taken to indicate any land use in which groups of individuals, particularly children, are engaged in activities, either formal or informal, which are intended to provide instruction, information, or mental or intellectual stimulation. Examples of such uses would include primary, secondary, or high schools (public or private), colleges, universities, graduate schools, specialized vocational schools, seminaries, nurseries, pre-schools, and day care centers.

Standard instrument departure (SID): See **instrument departure procedure**.

Standard Terminal Arrival Route (STAR): A series of standardized, predetermined, and published routes, procedures and/or maneuvers which enable aircraft to transition safely from the en route environment to the terminal environment. A STAR does not culminate in a landing, but terminates at a point from which an instrument approach to landing may be initiated.

Straight-out departure: A VFR departure procedure in which an aircraft exits the airport area along the extended centerline of the departure runway by extension of the upwind leg of the traffic pattern.

Suburban residential (land use): As employed in the Land Use Matrix and other sections of the ALUP, the term "suburban residential" indicates use of land for dwellings in such a manner that no more than one primary dwelling unit is developed on each legal parcel and the size of each legal parcel is 1 acre to 5 acres.

Tactical air navigation facility (TACAN): A ground-based radio navigational aid which transmits encoded signals that enable aircraft equipped with appropriate receivers to determine both bearing and distance with respect to the facility. The information with respect to bearing is generally available only to military aircraft, while information regarding distance is usable by both military and civil aircraft. TACAN facilities are frequently co-located with VORs.

Unobstructable Emergency Aircraft Landing Site: Any emergency aircraft landing site which cannot be eliminated or reduced in size without a general plan amendment, specific plan or specific plan amendment, zoning ordinance or zoning ordinance amendments, or other referring agency action which requires mandatory review by the ALUC.

Upwind leg: A segment of the airport traffic pattern which is coincident with the centerline of the departure runway. The upwind leg is the initial leg of the traffic pattern for departing aircraft and extends from takeoff to the crosswind leg or departure from the airport area.

Very high frequency omnidirectional range (VOR): A ground-based radio navigational aid which transmits encoded signals that enable aircraft equipped with appropriate receivers to determine their bearing with respect to the facility.

Very high frequency omnidirectional range with distance-measuring equipment (VOR-DME): A ground-based radio navigational aid which combines a VOR transmitter with a DME facility and which transmits encoded signals that enable aircraft equipped with appropriate receivers to determine both relative bearing and distance with respect to the facility.

Very high frequency omnidirectional range with tactical air navigation (VORTAC): A ground-based radio navigational aid which combines a VOR transmitter with a TACAN facility and which transmits encoded signals that enable both military and civilian aircraft equipped with appropriate receivers to determine both bearing and distance with respect to the facility.

Visual approach: A procedure whereby an aircraft which is operating in VMC according to an IFR flight plan and under control of an air traffic control facility may proceed to the airport of destination and land using visual navigational cues.

Visual approach slope indicator (VASI): A navigational aid installed adjacent to an airport runway which provides, by means of colored light beams, vertical course guidance to aircraft approaching to land on that runway. The usual descent slope provided by VASI installations is 3°.

Visual flight rules (VFR): A set of FAA rules, regulations, and procedures which define flight operations under conditions which allow navigation by means of visual information, pilotage, and dead reckoning alone. Also employed as an adjective to designate a flight plan which will enable an aircraft to operate under conditions which permit navigation by means of visual information alone. For takeoff and landing, operation under visual flight rules requires 3 statute miles visibility and a cloud ceiling of at least 1000 feet. A special VFR clearance may be obtained from ATC if visibility is 1 statute mile or greater and the pilot can maneuver to remain clear of clouds in the vicinity.

Visual meteorologic conditions (VMC): Weather conditions specified in FAA regulations under which aircraft are authorized to takeoff, land, and maneuver under visual flight rules and by means of only visual navigational information. Electronic aids to navigation may be utilized by aircraft operating in VMC, but are not required. The visibility and cloud clearance requirements for VMC are determined by the airspace designation in which and aircraft is operating, by the aircraft's altitude above both sea level and ground level, and by whether the aircraft is operating in daylight or at night.

VOR approach: A series of standardized, predetermined, and published aerial maneuvers which are based on lateral guidance information received by means of a VOR transmitter and which enable aircraft to descend toward an airport with the intention of landing when meteorologic conditions are such that a safe approach cannot be made solely through the use of visual information. The VOR facility may be located within the physical boundaries of the destination airport or at some distance from the airport. VOR approaches do not provide vertical guidance. A typical VOR approach permits aircraft to descend to within 400-500 feet of the surface solely on the basis of radio navigation aids.

Appendix I

Real Estate Disclosure Law and Legislation



Assembly Bill No. 2776

CHAPTER 496

An act to amend Section 11010 of the Business and Professions Code, and to amend Sections 1102.6, 1103.4, and 1353 of the Civil Code, relating to aviation.

[Approved by Governor September 12, 2002. Filed with Secretary of State September 12, 2002.]

LEGISLATIVE COUNSEL'S DIGEST

AB 2776, Simitian. Aviation: noise.

(1) Existing law requires any person who intends to offer subdivided lands within California for sale or lease to file with the Department of Real Estate an application for a public report consisting of a notice of intention and a completed questionnaire that includes, among other things, the location of all existing airports, and of all proposed airports shown on the general plan of any city or county, located within 2 statute miles of the subdivision. Existing law requires that a copy of the public report of the Real Estate Commissioner, when issued, be given to the prospective purchaser by the owner, subdivider, or agent prior to the execution of a binding contract or agreement for the sale or lease of any lot or parcel in a subdivision or upon request by any member of the public.

This bill would require the notice of intention filed with the application for a public report, to include a statement regarding whether the property is encompassed within an airport influence area, as defined.

(2) The Davis-Stirling Common Interest Development Act regulates common interest developments and defines the declarations and other governing documents that govern the operation of common interest developments and the associations that manage common interest developments. A declaration is required to contain specified information. Existing law provides that an owner of a separate interest in a common interest development must provide certain items to a prospective purchaser prior to transfer of title, including, among other things, a copy of the governing documents of the common interest development.

This bill would require that any declaration, recorded after January 1, 2004, contain a statement regarding whether the property is encompassed within an airport influence area.

(3) Existing law requires a seller of residential property, to make disclosures upon the transfer of that property, and sets forth the content

and form of these disclosures in a Real Estate Transfer Disclosure Statement and a Natural Hazard Disclosure Statement. Existing law requires certain sellers of residential real property who have actual knowledge that the property is affected by or zoned to permit certain manufacturing, commercial, or airport uses to give written notice of that knowledge, as soon as practicable before transfer of title. Existing law requires the disclosure statement to advise a purchaser that other reports and disclosures, such as an inspection report, have or will be made in connection with the transfer.

This bill would revise the Real Estate Transfer Disclosure Statement to require that statement to advise the prospective purchaser of other disclosures required by law, including the Natural Hazard Disclosure Report/Statement that may include airport annoyances, earthquake, fire, flood, or special assessment information, that have or will be made in connection with the transfer.

(4) Existing law limits the liability of a transferor for failing to disclose natural hazards if the transferor obtains a report or opinion prepared by a licensed engineer, land surveyor, geologist, or expert in natural hazard discovery dealing with matters within the scope of the professional's license or expertise.

The bill would condition this limitation upon the expert in natural hazard discovery determining whether the property is within an airport influence area and if so, providing notice with the report or opinion.

This bill would provide that its provisions will become operative on January 1, 2004.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares that the current mechanisms for providing notice to homebuyers of potential airport impact are inadequate, as evidenced by the number of complaints and lawsuits regarding airport noise by residents of surrounding communities.

SEC. 2. Section 11010 of the Business and Professions Code is amended to read:

11010. (a) Except as otherwise provided pursuant to subdivision (c) or elsewhere in this chapter, any person who intends to offer subdivided lands within this state for sale or lease shall file with the Department of Real Estate an application for a public report consisting of a notice of intention and a completed questionnaire on a form prepared by the department.

(b) The notice of intention shall contain the following information about the subdivided lands and the proposed offering:

(1) The name and address of the owner.

(2) The name and address of the subdivider.

(3) The legal description and area of lands.

(4) A true statement of the condition of the title to the land, particularly including all encumbrances thereon.

(5) A true statement of the terms and conditions on which it is intended to dispose of the land, together with copies of any contracts intended to be used.

(6) A true statement of the provisions, if any, that have been made for public utilities in the proposed subdivision, including water, electricity, gas, telephone, and sewerage facilities. For subdivided lands that were subject to the imposition of a condition pursuant to subdivision (b) of Section 66473.7 of the Government Code, the true statement of the provisions made for water shall be satisfied by submitting a copy of the written verification of the available water supply obtained pursuant to Section 66473.7 of the Government Code.

(7) A true statement of the use or uses for which the proposed subdivision will be offered.

(8) A true statement of the provisions, if any, limiting the use or occupancy of the parcels in the subdivision.

(9) A true statement of the amount of indebtedness that is a lien upon the subdivision or any part thereof, and that was incurred to pay for the construction of any onsite or offsite improvement, or any community or recreational facility.

(10) A true statement or reasonable estimate, if applicable, of the amount of any indebtedness which has been or is proposed to be incurred by an existing or proposed special district, entity, taxing area, assessment district, or community facilities district within the boundaries of which, the subdivision, or any part thereof, is located, and that is to pay for the construction or installation of any improvement or to furnish community or recreational facilities to that subdivision, and which amounts are to be obtained by ad valorem tax or assessment, or by a special assessment or tax upon the subdivision, or any part thereof.

(11) (A) As to each school district serving the subdivision, a statement from the appropriate district that indicates the location of each high school, junior high school, and elementary school serving the subdivision, or documentation that a statement to that effect has been requested from the appropriate school district.

(B) In the event that, as of the date the notice of intention and application for issuance of a public report are otherwise deemed to be qualitatively and substantially complete pursuant to Section 11010.2, the statement described in subparagraph (A) has not been provided by any school district serving the subdivision, the person who filed the

notice of intention and application for issuance of a public report shall immediately provide the department with the name, address, and telephone number of that district.

(12) (A) The location of all existing airports, and of all proposed airports shown on the general plan of any city or county, located within two statute miles of the subdivision. If the property is located within an airport influence area, the following statement shall be included in the notice of intention:

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

(B) For purposes of this section, an ''airport influence area,'' also known as an ''airport referral area,'' is the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses as determined by an airport land use commission.

(13) A true statement, if applicable, referencing any soils or geologic report or soils and geologic reports that have been prepared specifically for the subdivision.

(14) A true statement of whether or not fill is used, or is proposed to be used in the subdivision and a statement giving the name and the location of the public agency where information concerning soil conditions in the subdivision is available.

(15) Any other information that the owner, his or her agent, or the subdivider may desire to present.

(c) The commissioner may, by regulation, or on the basis of the particular circumstances of a proposed offering, waive the requirement of the submission of a completed questionnaire if the commissioner determines that prospective purchasers or lessees of the subdivision interests to be offered will be adequately protected through the issuance of a public report based solely upon information contained in the notice of intention.

SEC. 3. Section 1102.6 of the Civil Code is amended to read:

1102.6. The disclosures required by this article pertaining to the property proposed to be transferred are set forth in, and shall be made on a copy of, the following disclosure form:

State of California

Department of Real Estate

Disclosures in

Real Property

Transactions

Sixth Edition
2005

ARNOLD SCHWARZENEGGER
Governor
State of California

DALE BONNER
Secretary
Business, Transportation and Housing Agency

JEFF DAVI

Commissioner

Department of Real Estate

2005 booklet was revised pursuant to a consulting contract with Wallace, Puccio & Garrett; Principal Author and Editor – S. Guy Puccio.

2. Real Estate Transfer Disclosure Statement

The Real Estate Transfer Disclosure Statement (TDS) describes the condition of a property and, in the case of a sale, must be given to a prospective buyer as soon as practicable and before transfer of title. In the case of a transfer by a real property sales contract (as defined in Civil Code Section 2985) by a lease coupled with an option to purchase, or by a ground lease coupled with improvements, the TDS is to be delivered before the execution of any of the foregoing.

The seller and any broker(s)/agent(s) involved are to participate in the disclosures. If more than one broker/agent is involved, the broker/agent obtaining the offer is to deliver the disclosures to the prospective buyer unless the seller instructs otherwise.

Delivery to the prospective buyer of a report or opinion prepared by a licensed engineer, land surveyor, geologist, structural pest control operator, contractor, or other expert (dealing with matters within the scope of the professional's license or expertise) may limit the liability of the seller and the real estate broker(s)/agent(s) when making required disclosures. The overall intention is to provide meaningful disclosures about the condition of the property being sold or transferred.

(CAL. CIV. § 1102.4)

The following is the format of the Transfer Disclosure Statement:

REAL ESTATE TRANSFER DISCLOSURE STATEMENT

THIS DISCLOSURE STATEMENT CONCERNS THE REAL PROPERTY SITUATED IN THE CITY OF _____, COUNTY OF _____, STATE OF CALIFORNIA, DESCRIBED AS _____. THIS STATEMENT IS A DISCLOSURE OF THE CONDITION OF THE ABOVE DESCRIBED PROPERTY IN COMPLIANCE WITH SECTION 1102 OF THE CIVIL CODE AS OF _____, 20___. IT IS NOT A WARRANTY OF ANY KIND BY THE SELLER(S) OR ANY AGENT(S) REPRESENTING ANY PRINCIPAL(S) IN THIS TRANSACTION, AND IS NOT A SUBSTITUTE FOR ANY INSPECTIONS OR WARRANTIES THE PRINCIPAL(S) MAY WISH TO OBTAIN.

I

COORDINATION WITH OTHER DISCLOSURE FORMS

This Real Estate Transfer Disclosure Statement is made pursuant to Section 1102 of the Civil Code. Other statutes require disclosures, depending upon the details of the particular real estate transaction (for example: special study zone and purchase-money liens on residential property).

Substituted Disclosures: The following disclosures have or will be made in connection with this real estate transfer, and are intended to satisfy the disclosure obligations on this form, where the subject matter is the same:

☐ Inspection reports completed pursuant to the contract of sale or receipt for deposit.

☐ Additional inspection reports or disclosures:

_____

_____

_____

II

SELLER'S INFORMATION

The Seller discloses the following information with the knowledge that even though this is not a warranty, prospective Buyers may rely on this information in deciding whether and on what terms to purchase the subject property. Seller hereby authorizes any agent(s) representing any principal(s) in this transaction to provide a copy of this statement to any person or entity in connection with any actual or anticipated sale of the property.

THE FOLLOWING ARE REPRESENTATIONS MADE BY THE SELLER(S) AND ARE NOT THE REPRESENTATIONS OF THE AGENT(S), IF ANY. THIS INFORMATION IS A DISCLOSURE AND IS NOT INTENDED TO BE PART OF ANY CONTRACT BETWEEN THE BUYER AND SELLER.

Seller ___ is ___ is not occupying the property.

A. The subject property has the items checked below (read across):

__Range	__Oven	__Microwave
__Dishwasher	__Trash Compactor	__Garbage Disposal
__Washer/Dryer Hookups		__Rain Gutters
__Burglar Alarms	__Smoke Detector(s)	__Fire Alarm
__TV Antenna	__Satellite Dish	__Intercom
__Central Heating	__Central Air Cndtng.	__Evaporative Cooler(s)
__Wall/Window Air Cndtng.	__Sprinklers	__Public Sewer System
__Septic Tank	__Sump Pump	__Water Softener
__Patio/Decking	__Built-in Barbecue	__Gazebo
__Sauna		
__Hot Tub __ Locking Safety Cover*	__Pool __ Child Resistant Barrier*	__Spa__ Locking Safety Cover*
__Security Gate(s)	__Automatic Garage Door Opener(s)*	__Number Remote Controls
Garage: __Attached	__Not Attached	__Carport
Pool/Spa Heater: __Gas	__Solar	__Electric
Water Heater: __Gas	__Water Heater Anchored, Braced, or Strapped*	__Private Utility or Other _____
Water Supply: __City	__Well	
Gas Supply: __Utility	__Bottled	
__Window Screens	__Window Security Bars	
	__Quick Release Mechanism on Bedroom Windows*	

Exhaust Fan(s) in _____220 Volt Wiring in _____ Fireplace(s) in _____

Gas Starter _____ Roof(s): Type: _____ Age: _____ (approx.)

Other: _____

Are there, to the best of your (Seller's) knowledge, any of the above that are not in operating condition? ___Yes ___No. If yes, then describe.

(Attach additional sheets if necessary): _____

_____

_____

_____

B. Are you (Seller) aware of any significant defects/malfunctions in any of the following? __ Yes __ No. If yes, check appropriate space(s) below.

___Interior Walls ___Ceilings ___Floors ___Exterior Walls ___Insulation __Roof(s) ___Windows ___Doors ___Foundation ___Slab(s) ___Driveways ___Sidewalks ___Walls/Fences ___Electrical Systems ___Plumbing/Sewers/Septics ___Other

Structural Components (Describe: _____

_____)

If any of the above is checked, explain. (Attach additional sheets if necessary): _

_____

_____

_____

* This garage door opener or child resistant pool barrier may not be in compliance with the safety standards relating to automatic reversing devices as set forth in Chapter 12.5 (commencing with Section 19890) of Part 3 of Division 13 of, or with the pool safety standards of Article 2.5 (commencing with Section 115920) of Chapter 5 of Part 10 of Division 104 of, the Health and Safety Code. The water heater may not be anchored, braced, or strapped in accordance with Section 19211 of the Health and Safety Code. Window security bars may not have quick-release mechanisms in compliance with the 1995 Edition of the California Building Standards Code.

C. Are you (Seller) aware of any of the following:

1. Substances, materials or products which may be an environmental hazard such as, but not limited to, asbestos, formaldehyde, radon gas, lead-based paint, fuel or chemical storage tanks, and contaminated soil or water on the subject property ..... __Yes __No
2. Features of the property shared in common with adjoining landowners, such as walls, fences, and driveways, whose use or responsibility for maintenance may have an effect on the subject property ..... __Yes __No
3. Any encroachments, easements or similar matters that may affect your interest in the subject property ..... __Yes __No
4. Room additions, structural modifications, or other alterations or repairs made without necessary permits..... __Yes __No
5. Room additions, structural modifications, or other alterations or repairs not in compliance with building codes . __Yes __No
6. Fill (compacted or otherwise) on the property or any portion thereof..... __Yes __No
7. Any settling from any cause, or slippage, sliding, or other soil problems..... __Yes __No
8. Flooding, drainage or grading problems ..... __Yes __No
9. Major damage to the property or any of the structures from fire, earthquake, floods, or landslides ..... __Yes __No
10. Any zoning violations, nonconforming uses, violations of "setback" requirements..... __Yes __No
11. Neighborhood noise problems or other nuisances..... __Yes __No
12. CC&R's or other deed restrictions or obligations ..... __Yes __No
13. Homeowners' Association which has any authority over the subject property ..... __Yes __No
14. Any "common area" (facilities such as pools, tennis courts, walkways, or other areas co-owned in undivided interest __Yes __No

with others) .....

15. Any notices of abatement or citations against the property... __Yes __No

16. Any lawsuits by or against the seller threatening to or affecting this real property, including any lawsuits alleging a defect or deficiency in this real property or "common areas" (facilities such as pools, tennis courts, walkways, or other areas co-owned in undivided interest with others) ..... __Yes __No

If the answer to any of these is yes, explain. (Attach additional sheets if necessary.)
_____

_____

_____

Seller certifies that the information herein is true and correct to the best of the Seller's knowledge as of the date signed by the Seller.

Seller _____ Date _____

Seller _____ Date _____

III

AGENT'S INSPECTION DISCLOSURE

(To be completed only if the Seller is represented by an agent in this transaction.)

THE UNDERSIGNED, BASED ON THE ABOVE INQUIRY OF THE SELLER(S) AS TO THE CONDITION OF THE PROPERTY AND BASED ON A REASONABLY COMPETENT AND DILIGENT VISUAL INSPECTION OF THE ACCESSIBLE AREAS OF THE PROPERTY IN CONJUNCTION WITH THAT INQUIRY, STATES THE FOLLOWING:

☐ Agent notes no items for disclosure.

☐ Agent notes the following items:

_____
_____
_____
_____

Agent (Broker Representing Seller) _____ By _____ Date_____
(Please Print) (Associate Licensee or Broker-Signature)

IV

AGENT'S INSPECTION DISCLOSURE

(To be completed only if the agent who has obtained the offer is other than the agent above.)

THE UNDERSIGNED, BASED ON A REASONABLY COMPETENT AND DILIGENT VISUAL INSPECTION OF THE ACCESSIBLE AREAS OF THE PROPERTY, STATES THE FOLLOWING:

☐ Agent notes no items for disclosure.

☐ Agent notes the following items:

_____

_____

_____

_____

Agent (Broker Representing Seller) _____ By _____ Date_____

(Please Print) (Associate Licensee or Broker-Signature)

V

BUYER(S) AND SELLER(S) MAY WISH TO OBTAIN PROFESSIONAL ADVICE AND/OR INSPECTIONS OF THE PROPERTY AND TO PROVIDE FOR APPROPRIATE PROVISIONS IN A CONTRACT BETWEEN BUYER AND SELLER(S) WITH RESPECT TO ANY ADVICE/INSPECTIONS/DEFECTS

I/WE ACKNOWLEDGE RECEIPT OF A COPY OF THIS STATEMENT

Seller_____ Date_____ Buyer_____ Date_____

Seller_____ Date_____ Buyer_____ Date_____

Agent (Broker Representing Seller) _____ By _____ Date_____
(Please Print) (Associate Licensee or Broker-Signature)

Agent (Broker Obtaining the Offer) _____ By _____ Date_____
(Please Print) (Associate Licensee or Broker-Signature)

SECTION 1102.3 OF THE CIVIL CODE PROVIDES A BUYER WITH THE RIGHT TO RESCIND A PURCHASE CONTRACT FOR AT LEAST THREE DAYS AFTER THE DELIVERY OF THIS DISCLOSURE IF DELIVERY OCCURS AFTER THE SIGNING OF AN OFFER TO PURCHASE. IF YOU WISH TO RESCIND THE CONTRACT, YOU MUST ACT WITHIN THE PRESCRIBED PERIOD.

A REAL ESTATE BROKER IS QUALIFIED TO ADVISE ON REAL ESTATE. IF YOU DESIRE LEGAL ADVICE, CONSULT YOUR ATTORNEY.

(CAL. CIV. § 1102 et. seq.)

SEC. 4. Section 1103.4 of the Civil Code is amended to read:

1103.4. (a) Neither the transferor nor any listing or selling agent shall be liable for any error, inaccuracy, or omission of any information delivered pursuant to this article if the error, inaccuracy, or omission was not within the personal knowledge of the transferor or the listing or selling agent, and was based on information timely provided by public agencies or by other persons providing information as specified in subdivision (c) that is required to be disclosed pursuant to this article, and ordinary care was exercised in obtaining and transmitting the information.

(b) The delivery of any information required to be disclosed by this article to a prospective transferee by a public agency or other person providing information required to be disclosed pursuant to this article shall be deemed to comply with the requirements of this article and shall relieve the transferor or any listing or selling agent of any further duty under this article with respect to that item of information.

(c) The delivery of a report or opinion prepared by a licensed engineer, land surveyor, geologist, or expert in natural hazard discovery dealing with matters within the scope of the professional's license or expertise, shall be sufficient compliance for application of the exemption provided by subdivision (a) if the information is provided to the prospective transferee pursuant to a request therefor, whether written or oral. In responding to that request, an expert may indicate, in writing, an understanding that the information provided will be used in fulfilling the requirements of Section 1103.2 and, if so, shall indicate the required disclosures, or parts thereof, to which the information being furnished is applicable. Where that statement is furnished, the expert shall not be responsible for any items of information, or parts thereof, other than those expressly set forth in the statement. In responding to the request, the expert shall determine whether the property is within an airport influence area as defined in subdivision (b) of Section 11010 of the Business and Professions Code. If the property is within an airport influence area, the report shall contain the following statement:

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

SEC. 5. Section 1353 of the Civil Code is amended to read:

1353. (a) (1) A declaration, recorded on or after January 1, 1986, shall contain a legal description of the common interest development, and a statement that the common interest development is a community apartment project, condominium project, planned development, stock cooperative, or combination thereof. The declaration shall additionally set forth the name of the association and the restrictions on the use or enjoyment of any portion of the common interest development that are intended to be enforceable equitable servitudes. If the property is located within an airport influence area, a declaration, recorded after January 1, 2004, shall contain the following statement:

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

(2) For purposes of this section, an ''airport influence area,'' also known as an ''airport referral area,'' is the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses as determined by an airport land use commission.

(3) The statement in a declaration acknowledging that a property is located in an airport influence area does not constitute a title defect, lien, or encumbrance.

(b) The declaration may contain any other matters the original signator of the declaration or the owners consider appropriate.

SEC. 6. This act shall become operative on January 1, 2004.

O



ALAMEDA COUNTY
Community Development Agency

PLANNING DEPARTMENT

224 W. Winton Ave., Room 111
Hayward, CA 94544

phone 510.670.5400
fax 510.785.8793
www.acgov.org/cda

SUPPLEMENTARY SITE ASSESSMENT REPORT
May 17, 1995

FORMER CHROMEX FACILITY
1400 Park Avenue
Emeryville, California

Alton Project No. 41-0042

Prepared For:

O'MELVENY & MYERS
Embarcadero Center West
275 Battery Street
San Francisco, California 94111-3305

Prepared By:

Kevin M. Keenan
Senior Geologist

Matthew W. Katen, RG
Senior Geologist

ALTON GEOSCIENCE
30A Lindbergh Avenue
Livermore, California 94550



TABLE OF CONTENTS

Section		Page
1.0	INTRODUCTION	1
2.0	SITE DESCRIPTION	1
3.0	BACKGROUND SITE CONDITIONS	2
4.0	REGIONAL SOIL AND GROUNDWATER CONTAMINATION	3
	4.1 Electro-Coatings, Inc.	4
	4.2 Del Monte Plant 35	4
5.0	FIELD ACTIVITIES	5
	5.1 Drilling and Soil Sampling	5
	5.2 Well Elevation Survey	6
	5.3 Fluid Level Monitoring and Groundwater Sampling	6
	5.4 Soil and Water Disposal	6
6.0	FINDINGS AND CONCLUSIONS	7
7.0	REFERENCES	11

Figures

1 Vicinity Map

2 Adjacent Properties Location Map

3 Summary of Previous Investigation Results

4 Regional Groundwater Chromium and Hexavalent Chromium Concentrations

5 Regional Groundwater HVOC Concentrations

6 Site Plan

7 Cross Section A-A'

8 Adsorbed-Phase Concentrations

9 Groundwater Elevation Contour Map

TABLE OF CONTENTS
(Continued)

10 Dissolved-Phase Concentrations

11 Total Chromium, October and November 1991, Electro-Coatings, Inc.

12 Trichloroethylene, October and November 1991, Electro-Coatings, Inc.

Tables

1 Summary of Excel Trans Soil Sample Analysis, October 1992

2 Summary of Alton Geoscience Soil Sample Analysis, December 1994 and March 1995

3 Summary of Groundwater Monitoring and Analysis

4 Summary of Groundwater HVOC Analysis

Appendices

A General Field Procedures, Boring Logs, and Well Construction Details

B Official Laboratory Reports and Chain of Custody Records

C Survey Data

1.0 INTRODUCTION

This report presents the findings of a supplementary site assessment investigation conducted at the Former Chromex Facility, Charles Lowe Company, in Emeryville, California (Figure 1). This work was performed in accordance with the Alameda County Health Care Services Agency (ACHCSA), Department of Environmental Health requirements, and the Environmental Science and Engineering, Inc. (ESE) site assessment workplan dated September 29, 1994.

The objective of this investigation was to:

- Characterize the vertical and horizontal extent of selected metals and organic compounds, if any, in soil and groundwater in the vicinity of the former chrome plating facility.

2.0 SITE DESCRIPTION

Present Site Use: The site is currently occupied by the Charles Lowe Company, a manufacturing facility that produces and repairs marine and industrial equipment.

Past Site Use: A one room addition to the present building was constructed in 1973 by the Fred Myer company and was used to provide electroplating and metal spraying support for operations at the Charles Lowe facility. The addition was used by Modern Plating (a subsidiary of the Fred Myer company) until 1978, and by Chromex (a division of the Charles Lowe Company) until 1991. The addition was dismantled in July 1992 during closure of the Chromex facility (Environmental Science and Engineering, 1994).

Future Site Use: The site is expected to continue its present use as an industrial facility. The Charles Lowe Company is in the process of vacating the premises.

Surrounding Properties: Nearby properties include Electro-Coatings, Inc. (ECI) (formerly a metal plating business) which is located at 1401 Park Avenue directly south of the property, Sherwin-Williams manufacturing plant at 1450 Sherwin Drive to the west of the site, Plywood Lumber and Sales Company at 4050 Horton Street to the north of the site, and a Pacific Gas and Electric Company equipment yard located at 4227 Hollis Street to the east of the

site. Del Monte Plant #35 (a former food processing plant) is located approximately 400 feet east of the site at 4204 Hollis Street.

Geography: The site is located approximately 1/4 mile east of the San Francisco Bay at an elevation of approximately 15 feet above mean sea level. The topography of the site is relatively flat and slopes gently to the west.

Geology: The site is located on the tidal plane bounding the eastern edge of the San Francisco Bay. The sediments are Holocene interfluvial basin deposits consisting of poorly sorted organic-rich clays and silty clays overlying alluvial fan deposits of interfingered clayey gravel and sandy silty clay lenses (Helley et al, 1979).

Regional Hydrogeology: Depth to groundwater in the area is approximately 10 feet below grade (fbg) with a general gradient direction from the southeast to the northwest. The groundwater gradient varies locally in direction and magnitude possibly due to seasonal groundwater fluctuations.

Groundwater Quality and Usage: Information obtained from the Alameda County Public Works Agency in Hayward revealed no domestic water production wells in use within a 1-mile radius of the site.

3.0 BACKGROUND SITE CONDITIONS

The following conditions existed at the site prior to this investigation:

- Soil samples collected in 1992 indicated that background total chromium concentrations ranged from 27 to 88 parts per million (ppm) at the site.
- In 1992 background total lead concentrations ranged from less than 2.5 to 26 ppm at the site. One soil sample collected in 1992 from a depth of 1 foot below grade contained a lead concentration of 270 ppm.
- Ground water at the site is present at a depth of approximately 8 feet below grade.

- A below grade concrete vault, which acted as secondary containment for six former vats used during chrome plating activities, was removed in 1992. Dimensions of the vault are reported as 12 feet deep, 22 feet wide and 18.5 feet long (Excel Trans, 1992a). A Final Closure Report issued by Excel Trans on November 1, 1992 indicates that the vault was excavated and removed along with approximately 40 yards of soil generated during shoring activities prior to the vault removal (Excel Trans, 1992a). The report indicated that an excavation to a total depth of approximately 10 fbg was completed during vault removal activities. West of the vault an above ground bermed concrete pad that contained two tanks used during plating operations was also decommissioned. On September 9, 1992, two soil samples (SO-1 and SO-2) collected from beneath the floor of the vault at a depth of approximately 10 feet below grade indicated the presence of elevated chromium concentrations. Concentrations of 1,300 and 540 ppm total chromium were detected in the northwest and southeast corners of the vault, respectively (Excel Trans, 1992b). See Figure 3 for the approximate soil sample locations.

- On October 1, 1992, Excel Trans performed a subsurface investigation at the site after removal of the vault. Four soil borings were completed during the investigation. Boring B0 was completed as a control boring in the northeast corner of the site to establish a background level for total chromium at the site. Borings B2 and B3 were completed adjacent to the above ground concrete pad location and Boring B1 was completed adjacent to the northwest corner of the former vault. Soil samples were collected from the borings at depths of approximately 1-2, 5, and 10 fbg (Excel Trans, 1992b). See Figure 3 for the approximate boring locations and Table 1 for a summary of soil sample analysis.

- On October 1, 1992, Excel Trans collected grab water samples from borings B0, B1 and B3. Analysis of these samples indicated the presence of chlorinated solvents trichloroethene (TCE) and tetrachloroethene (PCE) in low concentrations. A grab surface water sample collected from the floor of the vault contained a concentration of 2.5 ppm chromium (Excel Trans, 1992b).

4.0 REGIONAL SOIL AND GROUNDWATER CONTAMINATION

The former Chromex facility is located in an area of Emeryville that has historically been occupied by industrial and manufacturing facilities. Several sites within a 5/8 mile radius of the former Chromex facility are listed as hazardous waste storage, generators, and/or release sites on existing federal and state databases. On February 6, 1995, Alton Geoscience conducted a detailed case review of nearby hazardous waste sites on file at ACHCSA. Files for two sites in

the immediate vicinity of the former Chromex facility with known chromium and/or solvent contamination were reviewed. A summary of conditions for the sites is provided in this section.

4.1 ELECTRO-COATINGS INC. FACILITY

The Electro-Coatings Inc. (ECI) facility is located at 1401 Park Avenue in Emeryville, approximately 100 feet south of the existing Charles Lowe facility at 1400 Park Avenue (Figure 2). ECI was formerly a chrome plating facility. Chrome plating activities ceased in 1989.

Historically, total chromium, hexavalent chromium, and chlorinated solvent concentrations have been detected in groundwater samples collected at the ECI facility since 1977. Recent data collected in July 1994 indicate the contaminants are migrating offsite to the north, northwest and west of the facility in the general direction of the former Chromex facility (Figures 4 and 5). ECI Monitoring Wells MW-4 and MW-16 are located on the northern most edge of the ECI facility directly across Park Avenue from the former Chromex facility. In July 1994, ECI Monitoring Well MW-4 contained concentrations of 6,300 parts per billion (ppb) hexavalent chromium and 6,500 ppb TCE, and Monitoring Well MW-16 contained 320,000 ppb hexavalent chromium and 22,000 ppb TCE. These wells are located approximately 200 feet crossgradient/upgradient from the former Chromex tank vault location. ECI Monitoring Well MW-19 located in Horton Street to the southwest of the former Chromex facility could not be located during site investigation work conducted by Alton Geoscience in December 1994. In 1985 this well contained 20 ppb hexavalent chromium, 20 ppb total chromium, and 91 ppb TCE (Entrix, 1994).

Soil samples collected from onsite soil borings drilled to the south of ECI's main building in 1983 and 1985, detected elevated total chromium concentrations at depths ranging from 4 to 8.5 fbg (maximum concentration of 5,200 ppm total chromium). A boring drilled in an abandoned railway track immediately to the east of ECI contained a maximum total chromium concentration of 6,700 ppm at a depth of 2.5 fbg (Entrix, 1994).

Complete historical results for the ECI facility are presented in a report prepared for ECI by Entrix, Inc., on October 28, 1994, on file at ACHCSA.

4.2 DEL MONTE PLANT 35

The Del Monte Plant 35 is located on two adjacent properties at 4202 Hollis Street (West Parcel) and 1250 Park Avenue (East Parcel) in Emeryville, directly east of the former Chromex site (Figure 2). This facility was a food processing plant from the late 1920's to 1989. Chlorinated solvents were first discovered in the soil and groundwater on the West Parcel in 1989 during

underground storage tank (UST) removal activities. Subsequent site assessment activities were carried out. Analytical results have shown dissolved-phase TCE and PCE concentrations as high as 1,600 ppb TCE and 110 ppb of PCE in 1992. The groundwater flow direction has been shown to be to the west and southwest in the general direction of the former Chomex facility. A groundwater treatment system was installed at the West Parcel of the property in 1993 and was expanded in 1994. Results of soil sample analyses during soil excavation activities on the East Parcel in 1994 indicated adsorbed-phase TCE and PCE concentrations as high as 6,800 ppb and 247,000 ppb, respectively. In addition, concentrations of 1,300 ppb cis-1,2-dichloroethene (cis-1,2-DCE), and 8,900 ppb vinyl chloride were detected in soil samples collected from the east parcel excavation (CH2M Hill, 1994 and 1995).

Del Monte Monitoring Well MW-12 is located offsite in a downgradient direction from the Del Monte West parcel, approximately 480 feet directly upgradient of the former Chromex facility (Figure 5). In March 1994, this well contained a dissolved-phase TCE concentration of 170 ppb and on December 29, 1994, a dissolved-phase TCE concentration of 28 ppb (CH2M Hill, 1995). Complete results for site assessment and remediation activities conducted at the Del Monte facility are on file at the ACHCSA.

5.0 FIELD ACTIVITIES

5.1 DRILLING AND SOIL SAMPLING

On December 19 and 20, 1994, Alton Geoscience conducted a supplementary site assessment at the Former Chromex Facility, Charles Lowe Company. The investigation included the drilling of six soil borings (B-1 through B-6) and the installation of three groundwater monitoring wells (MW-1 through MW-3) to an approximate depth of 24 fbg. Refer to Figure 6 for the soil boring and well locations. The groundwater monitoring wells were developed approximately 72 hours after installation using a surge block and bailer.

Soil samples were collected at depth intervals of 5 feet or less using a California-modified split spoon sampler. Refer to Appendix A for details regarding general field procedures, boring logs, and groundwater monitoring well construction details. See Figure 7 for a geologic cross section showing soil types beneath the site.

On March 17, 1995, Alton Geoscience collected additional soil samples from a depth of 5 fbg immediately adjacent to Soil Borings B-1, B-2, B-4, and B-5. These samples were collected using a hand-auger as per standard regulatory protocol. Onsite activities were observed by Mr. Brian Oliva of the ACHCSA.

All soil samples collected during drilling and hand-augering activities were submitted to a state-certified laboratory, and select soil samples were analyzed for halogenated volatile organic compounds (HVOC) using EPA Method 8010, total chromium and total lead using EPA Method 6010, and hexavalent chromium using EPA Method 7196. In addition, the soil sample collected from MW-3 at 6.5 fbg was analyzed for PCBs using EPA Method 8080 and total recoverable petroleum hydrocarbons (TRPH) using EPA Method 418.1. The results of the laboratory analysis of soil samples are listed in Table 2, and select results are shown on Figure 8. Refer to Appendix B for a description of the analytical methods used and copies of the official Laboratory Reports, Quality Assurance/Quality Control (QA/QC) Reports, and Chain of Custody Records.

5.2 WELL ELEVATION SURVEY

On December 23, 1994, the new wells were surveyed relative to a city of Emeryville benchmark by Ron Archer, Civil Engineer Inc. Refer to Appendix C for the survey data.

5.3 FLUID LEVEL MONITORING AND GROUNDWATER SAMPLING

On December 23, 1994, fluid levels were measured and groundwater samples collected from the monitoring wells as per standard regulatory protocol. The groundwater samples were submitted to a state-certified laboratory for analysis for HVOC's using EPA Method 601, total chromium and total lead using EPA Method 200.7, and hexavalent chromium using EPA method 7196. Fluid levels were measured again on January 5, 1995 due to anomalous data collected during the previous reading. A groundwater elevation contour map using the January 5, 1995 data is shown in Figure 9. The results of the laboratory analysis of water samples are listed in Tables 3 and 4, and select results are shown on Figure 10. Refer to Appendix B for a description of the analytical methods used and copies of the official Laboratory Reports, Quality Assurance/Quality Control (QA/QC) Reports, and Chain of Custody Records.

5.4 SOIL AND WATER DISPOSAL

Approximately 3.5 cubic yards of soil cuttings were generated during drilling activities. The soil was stockpiled on and covered with plastic sheeting pending disposal at a certified waste disposal facility. Approximately 500 gallons of rinsate water and groundwater generated during well development were stored onsite in DOT-approved drums pending transport and disposal at a certified waste disposal facility.

6.0 FINDINGS AND CONCLUSIONS

Hydrogeology

- Average depth to groundwater at the site is approximately 8 fbg. The local hydraulic gradient is calculated to be approximately 0.007 foot-per-foot towards the northwest.

Soil Samples

- Hexavalent chromium concentrations of 1.2 and 27 ppm were detected in soil samples B-4 at 11.5 fbg and B-5 at 5 fbg, respectively. No hexavalent chromium concentrations were detected in any other soil samples collected at the site. The California Code of Regulations [CCR] Title 22, Article 11, Section 66699 total threshold limit concentration (TTLC) for hexavalent chromium is 500 ppm. The TTLC is used by the State of California to determine if a waste is a hazard to human health and safety, livestock and wildlife. The two hexavalent chromium concentrations detected at the site are significantly below the state TTLC level of 500 ppm. Laboratory results for soil samples collected at 5 fbg (27 ppm) and 11.5 fbg (vault floor level) (1.2 ppm), indicate that no significant (ie. 500 ppm or greater) hexavalent chromium soil contamination exists at the site in the vicinity of the former tank vault.

- Total chromium concentrations ranging from 19 to 91 ppm were detected in all soil samples collected at the site during this investigation. A maximum total chromium concentration of 91 ppm was detected in Boring B-5 at a depth of 5 fbg. Total chromium concentrations detected in soil samples collected from borings at the site during this investigation and borings completed during previous investigations (27 to 88 ppm [Excel Trans, 1992b]), are within the normal background range for soils of this type. Typical total chromium concentrations for shaley and sandy sediments range from 35 to 90 ppm (Drever, 1988). In addition, the concentrations detected are well below the CCR Title 22 TTLC of 2,500 ppm for chromium. For comparison, total chromium concentrations detected in soil samples collected at ECI ranged up to 6,700 ppm with several samples exceeding the TTLC.

- Elevated total chromium concentrations of 1,300 and 540 ppm were reported by Excel Trans in 1992 for two grab soil samples collected during vault closure activities. Soil Borings B-4 and B-2, completed during this investigation adjacent to the previous sample locations in the vault, did not detect elevated total chromium concentrations. Soil containing elevated total chromium concentrations may have been removed from the tank vault area during excavation for the installation of shoring prior to removing the vault

and/or is very limited in extent. The elevated chromium concentrations detected in 1992 are well below the CCR Title 22 TTLC of 2,500 ppm for chromium.

- Total lead concentrations were detected in all soil samples collected at the site during this investigation. A maximum total lead concentration of 12 ppm was detected in Boring B-5 at a depth of 5 fbg. Total lead concentrations detected during this investigation (3.4 to 12 ppm) and in borings (except B0 at 1 fbg) completed during previous investigations (less than 2.5 to 26 ppm [Excel Trans, 1992b]), are within the normal background range for soils of this type. Typical total lead concentrations for shaley and sandy sediments range from 7 to 20 ppm (Drever, 1988). Soil sample B0 collected by Excel Trans in 1992 from a depth of 1 foot below grade (Figure 3), contained a total lead concentration of 270 ppm. A total lead concentration of 3.5 ppm was detected at a depth of 5 fbg in boring B0. The shallow elevated lead concentration detected in 1992 likely reflects limited surface lead concentrations in soil resulting from past site activities. All lead concentrations detected at the site are well below the CCR Title 22 TTLC of 1,000 ppm for lead in soil.

- Adsorbed-phase HVOC concentrations (chlorinated solvents) were detected in two soil samples collected at the site. A TCE concentration of 8.0 ppb was detected in boring B-5 (adjacent to the former vault) at 11.5, fbg and a cis-1,2-DCE concentration of 30 ppb was detected in boring MW-3 (upgradient of the former vault) at 16.5 fbg. No other soil samples contained detectable concentrations of chlorinated solvents. The analytes detected are considered dense non-aqueous phase liquids (DNAPL), which have a higher density than water. In liquid form, these compounds will sink through permeable aquifer material and dissolve through the entire vertical section of the aquifer through which they have travelled. The concentrations of chlorinated solvents detected in the two soil samples are likely a result of dissolved-phase HVOC's present in groundwater (average depth to water of 7-8 fbg at the site) re-adsorbing to soil particles. No HVOC source was identified in the vicinity of the former tank vault location during this investigation.

- A TRPH concentration of 43 ppm was detected in soil boring MW-3 at a depth of 6.5 fbg. This concentration may have resulted from previous surface activities. Hydraulic lifting equipment was located at the site in the immediate vicinity of MW-3. The TRPH concentration detected is below the typical action level for adsorbed-phase hydrocarbons of this type and is likely limited in extent.

Groundwater Samples

- A dissolved-phase hexavalent chromium concentration of 0.025 ppm was detected in Monitoring Well MW-2. Hexavalent chromium was not detected in water samples

collected from Monitoring Wells MW-1 and MW-3. No significant hexavalent chromium concentrations were detected in the soil samples collected around the former tank vault (the potential source area for groundwater contamination). Dissolved-phase hexavalent chromium is adequately characterized at the site. For comparison, dissolved-phase hexavalent chromium concentrations detected in groundwater samples collected at ECI in 1994 ranged up to 454 ppm.

- Dissolved-phase total chromium concentrations were detected in groundwater samples collected from MW-1 and MW-2 at the site (0.069 and 0.044 ppm, respectively). The CCR Title 22 primary drinking water maximum contaminant level (mcl) for chromium is 0.05 ppm. The total chromium concentration in Monitoring Well MW-1 is slightly above this level and the total chromium concentration detected in Monitoring Well MW-2 meets the drinking water standard. Dissolved-phase total chromium is adequately characterized at the site. For comparison, dissolved-phase total chromium concentrations detected in groundwater samples collected at ECI in 1994 ranged up to 230 ppm. See Figure 11 for a total chromium concentration contour map based on 1991 data (drawn by Entrix for ECI).

- Dissolved-phase total lead was not detected in any of the monitoring wells.

- Dissolved-phase chlorinated solvents cis-1,2-DCE, PCE, and TCE were detected in groundwater samples collected from Monitoring Wells MW-1, MW-2 and MW-3. Maximum concentrations of 23 ppb cis-1,2-DCE in MW-3, 10 ppb PCE in MW-1, and 11 ppb TCE in MW-1 were detected at the site. A chlorobenzene concentration of 1.5 ppb and trans-1,2-dichloroethene concentration of 0.69 ppb were detected in Monitoring Wells MW-1 and MW-3, respectively. Concentrations of chlorobenzene and trans-1,2-DCE were not detected in the other wells at the site. Concentrations of HVOC were detected upgradient of the former tank vault location in Monitoring Well MW-3, indicating that solvents are likely migrating onto the site from the east. A review of the dissolved-phase HVOC data for both the Del Monte plant and ECI indicates the regional nature of the groundwater HVOC contamination (Figure 5). For this reason, dissolved-phase HVOC concentrations should be considered adequately characterized onsite.

- Significant offsite chromium, hexavalent chromium, and HVOC release sites (specifically ECI) have been identified locally in an upgradient/crossgradient direction from the former Chromex facility. Two figures from the 1994 Entrix report for ECI are included as Figures 11 and 12 in this report. Both figures illustrate the size and concentration of the chromium and chlorinated solvent plume located directly to the south of the former Chromex facility (concentration contours from both figures encroach onto the former

Chromex site). Concentrations of chromium, hexavalent chromium, and HVOC detected in the former Chromex monitoring wells may result from offsite sources.

The site assessment activities summarized in this report have been conducted in accordance with current practice and the standard of care exercised by geologists and engineers performing similar tasks in this area. No warranty, expressed or implied, is made regarding the conclusions and recommendations presented in this report. The conclusions and recommendations are based solely upon an analysis of the observed conditions. If actual conditions differ from those described in this report, our office should be notified.

7.0 REFERENCES

CH2M Hill, 1994, Report on Focused Soil Removal: East Parcel Del Monte Plant 35, Emeryville, California, December.

CH2M Hill, 1994, Quarterly Groundwater Monitoring and Groundwater Extraction and Treatment System Status Report: Del Monte Plant 35 - West Parcel, 4204 Hollis Street, Emeryville, California, January 31.

Drever, J.I., 1988, The Geochemistry of Natural Waters: Prentice Hall Publishing Company, Englewood Cliffs, NJ, p. 328-329.

Entrix, Inc., 1994, Summary of Site Conditions: Electro-Coatings, Inc. Facility, 1401 and 1421 Park Avenue, Emeryville, California, October 28.

Environmental Science and Engineering, Inc., 1994a, Phase I Environmental Site Assessment: Former Chromex Plating Facility, 1400 Park Avenue, Emeryville, California, August 23,

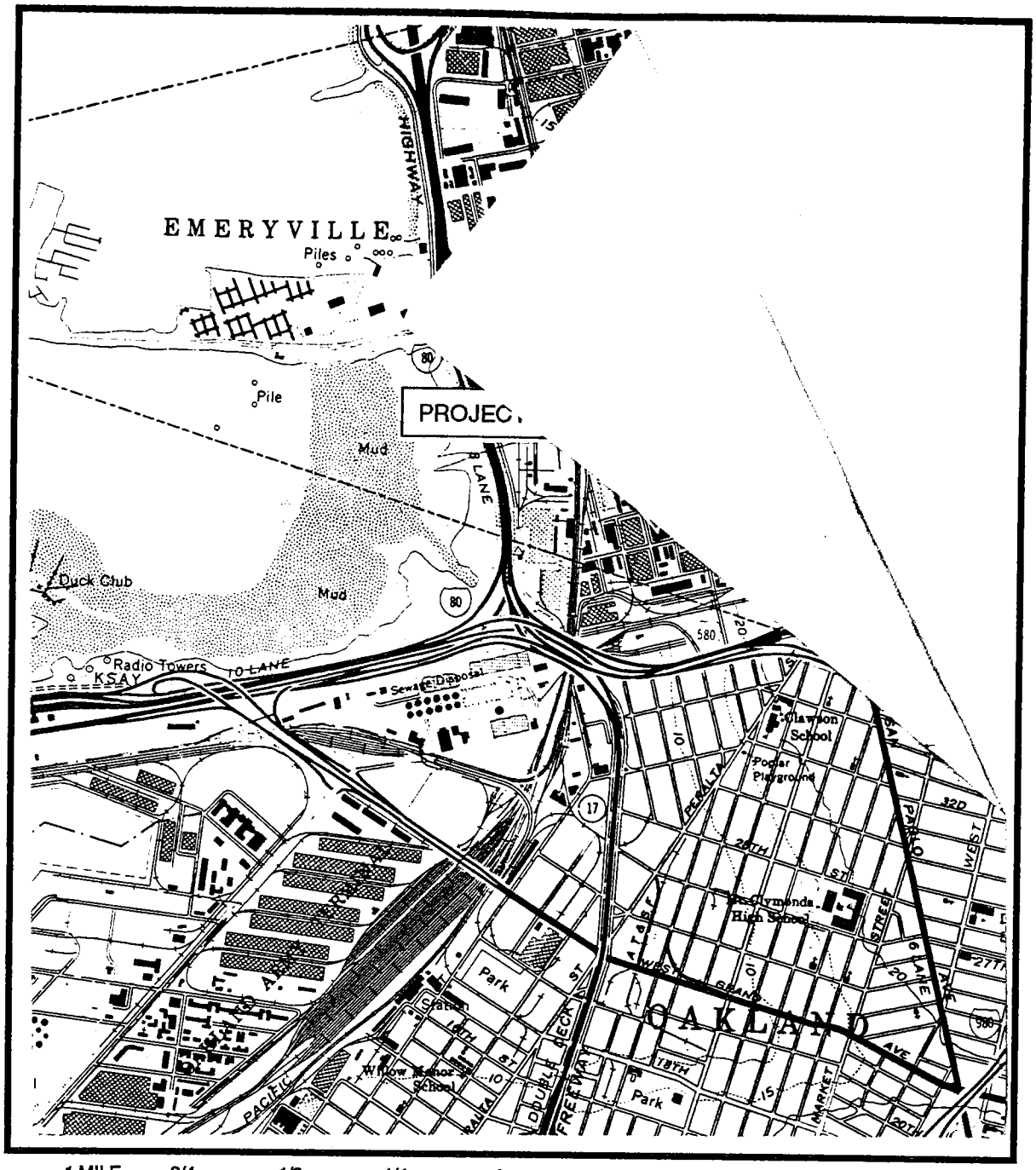
Environmental Science and Engineering, Inc., 1994b, Workplan for Phase II Environmental Site Assessment: Former Chromex Inc., 1400 Park Avenue, Emeryville, California, September 29.

Excel Trans, Inc., 1992a, Final Closure Report: Chromex Plating Facility, 1400 Park Avenue, Emeryville, California, November 1.

Excel Trans, Inc., 1992b, Summary of Subsurface Investigation and Immediate Mitigation Proposal: Chromex, 1400 Park Avenue, Emeryville, California, November 4.

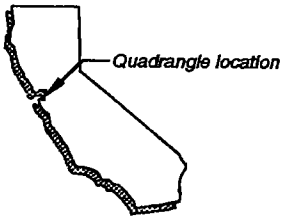
Helley, E.S., Laijoie, K.R., Spangle, W.E., and Blair, M.L., 1979, Flatland Deposits of the San Francisco Bay Region, California: U.S. Geological Survey Professional Paper 943.

FIGURES



1 MILE 3/4 1/2 1/4 0 1 MILE

SCALE 1:24,000



Source: U.S.G.S. Map
Oakland West Quadrangle
California
7.5 Minute Series

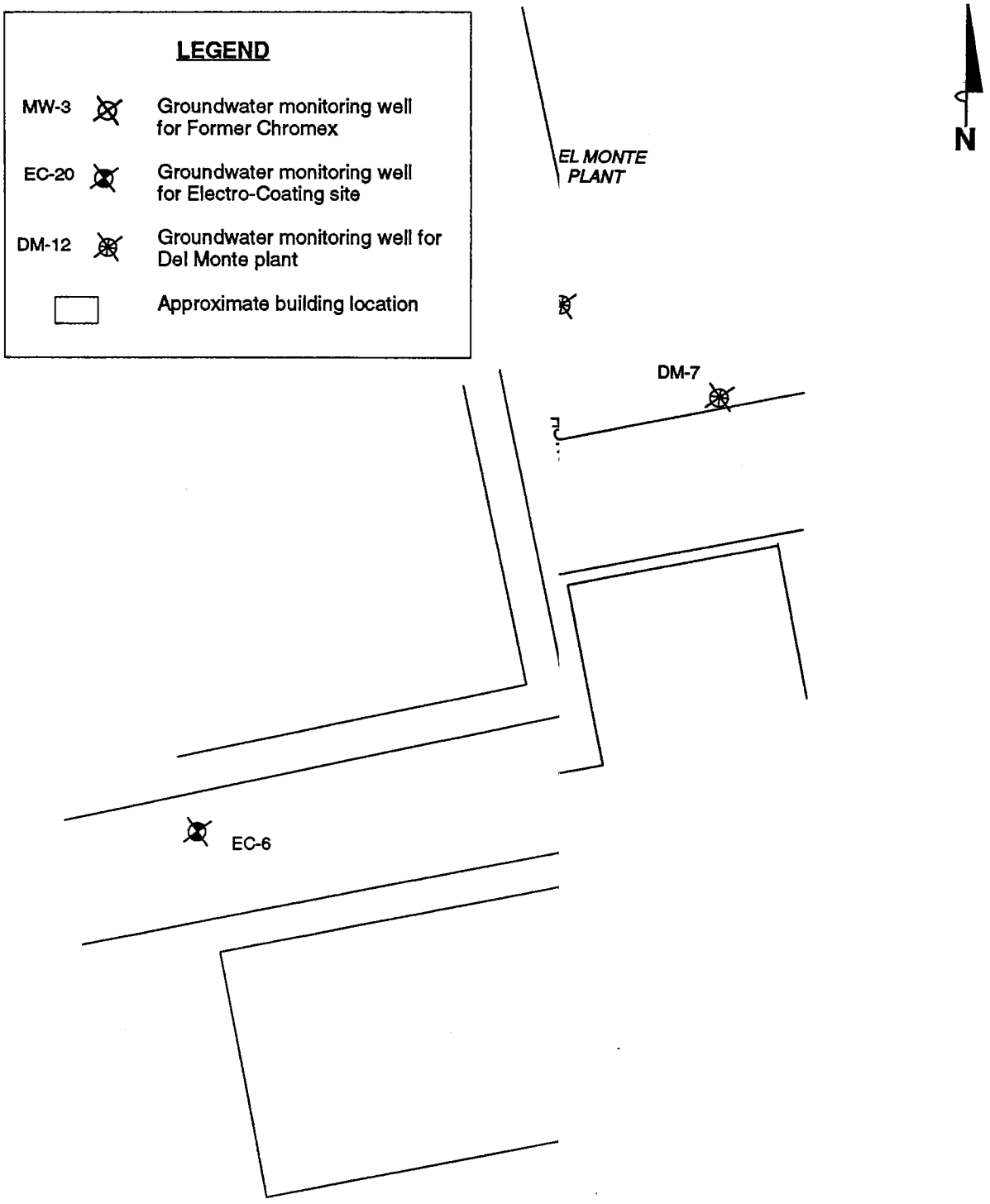
VICINITY MAP

Former Chromex Facility
1400 Park Avenue
Emeryville, California

ALTON GEOSCIENCE
Livermore, California

Project No. 41-0042

FIGURE 1



ADJACENT PROPERTIES LOCATION MAP

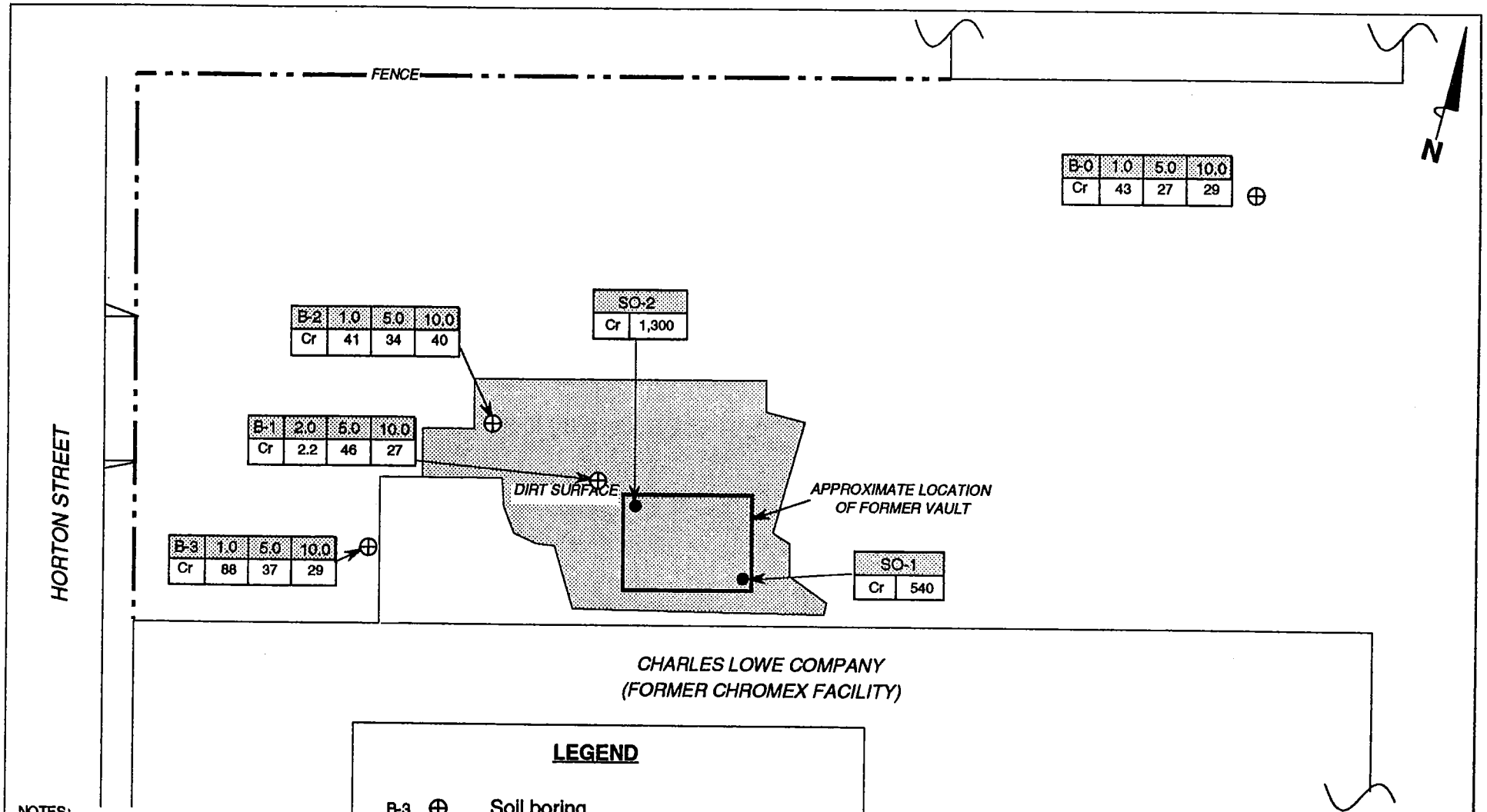
Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 2

ALTON GEOSCIENCE
Livermore, California

SCALE (feet)
0 50 100

41-0042/11X17 SITE PLAN 04/21/954



LEGEND

B-3 ⊕ Soil boring

SO-2 ● Soil sample location

MW-3	Depth
Cr	

Adsorbed-phase concentrations in ppm (depth in feet)

NOTES:
Sample locations and results taken from Excel Trans. Inc. report, November 4, 1992. ND = not detected at or above method detection limits. Cr = chromium. ppm = parts per million.

SCALE (FEET)

0 30 60

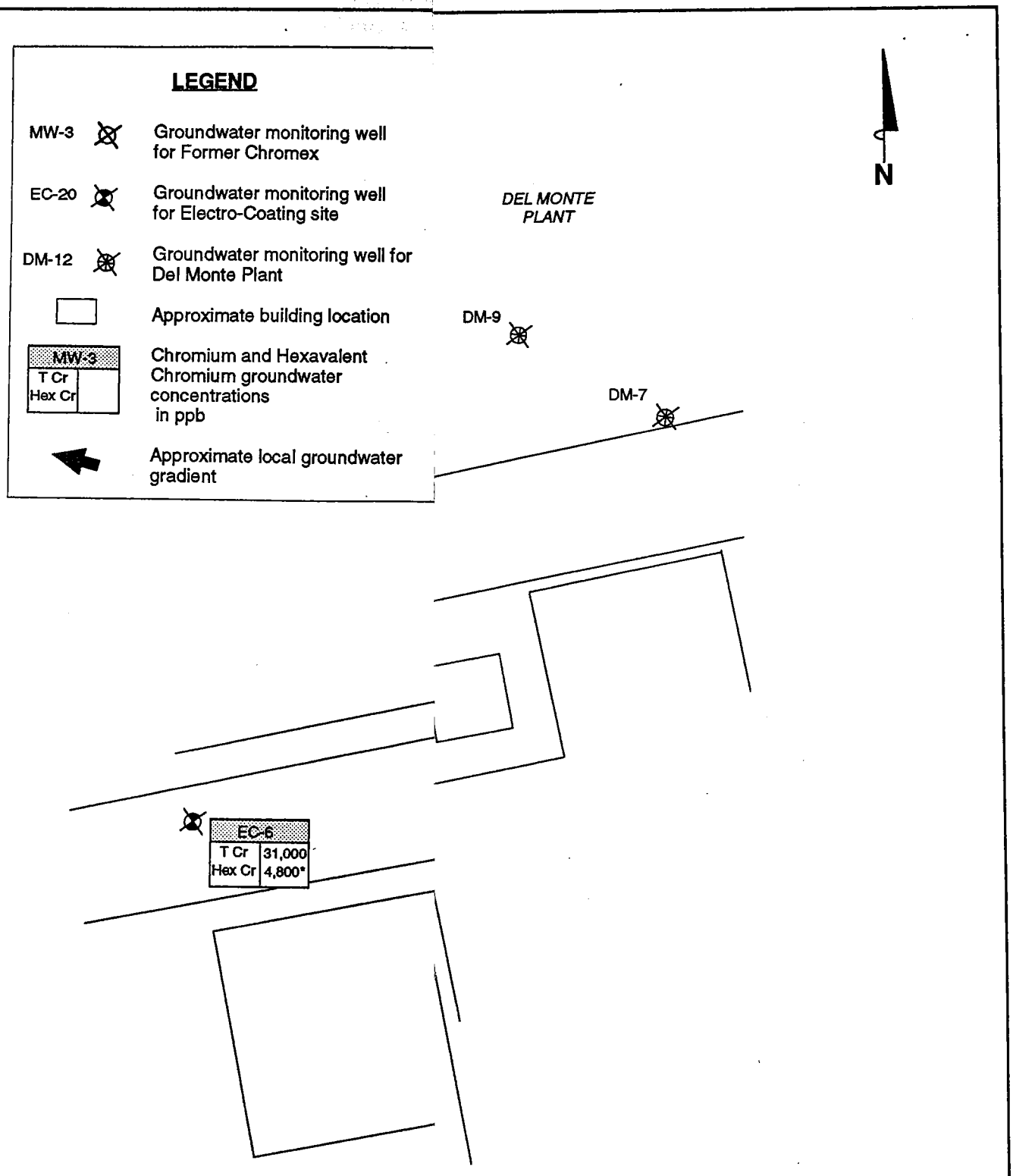
ALTON GEOSCIENCE
Livermore, California

Source: Modified from a map created by Ron Archer Civil Engineering Inc.

SUMMARY OF PREVIOUS INVESTIGATION RESULTS

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 3



NOTES:
Concentrations at former Chromex facility based on results of laboratory analysis of groundwater samples collected December 29, 1994. Concentrations for ECI facility based on results reported for October, November 1991 in Entrix, Inc. report, October 28, 1994 except where 1994 results are denoted by *. T Cr = total chromium; Hex Cr = hexavalent chromium; ppb = parts per billion.

ALTON GEOSCIENCE
Livermore, California

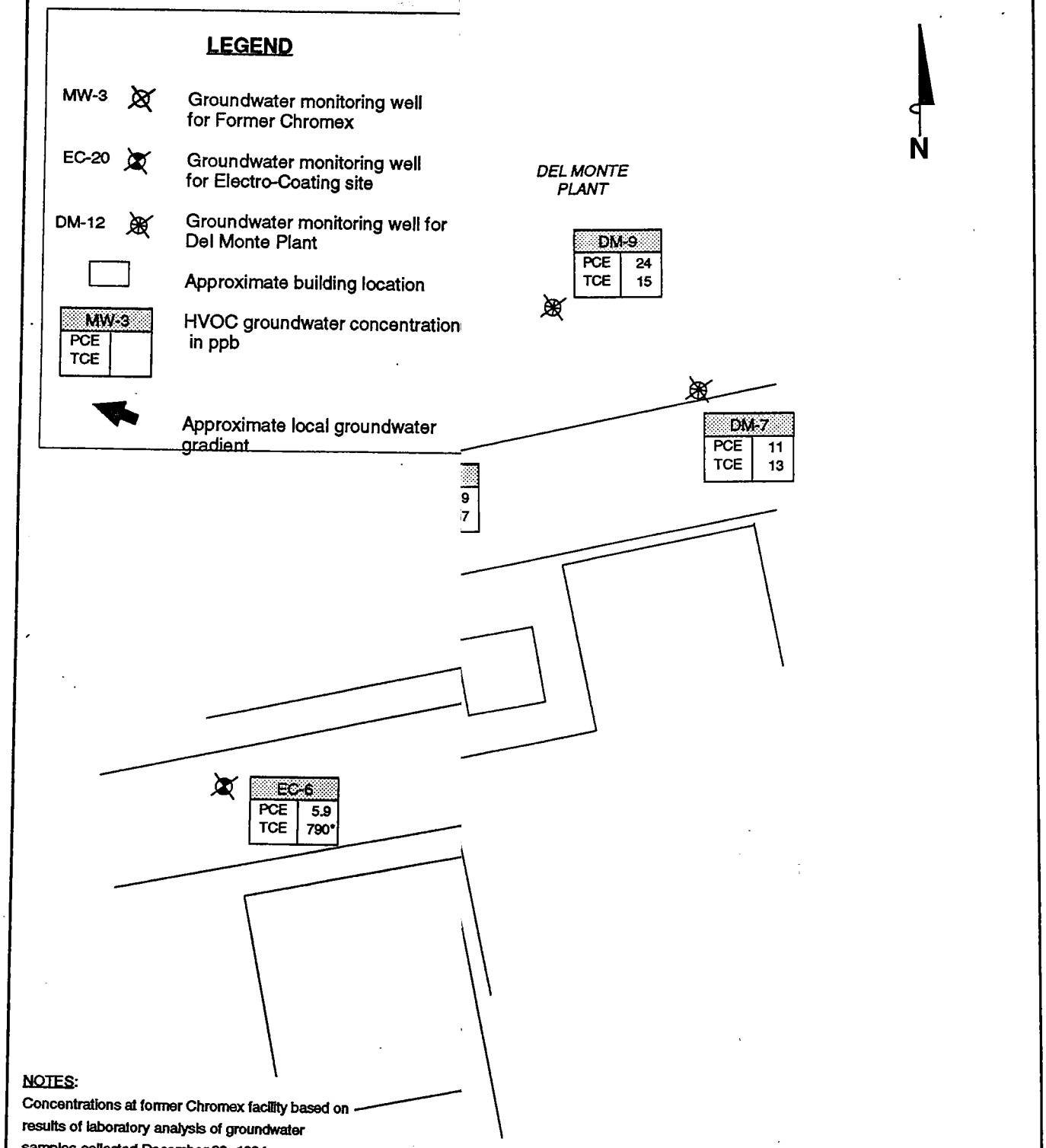
SCALE (feet
0 50

REGIONAL GROUNDWATER CHROMIUM AND HEXAVALENT CHROMIUM CONCENTRATIONS

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 4

41-0042/11X17 SITE PLAN 04/21/954



NOTES:
Concentrations at former Chromex facility based on results of laboratory analysis of groundwater samples collected December 29, 1994. Concentrations for ECI facility based on results reported for October, November 1991 in Entrix, Inc. report, October 28, 1994 except where * indicates 1994 sample result. Concentrations at Del Monte Plant are maximum concentrations reported in CH2M Hill, January 31, 1995. HVOC = halogenated volatile oraganic compounds; PCE = tetrachloroethene; TCE = trichloroethene; ppb = parts per billion.

ALTON GEOSCIENCE
Livermore, California

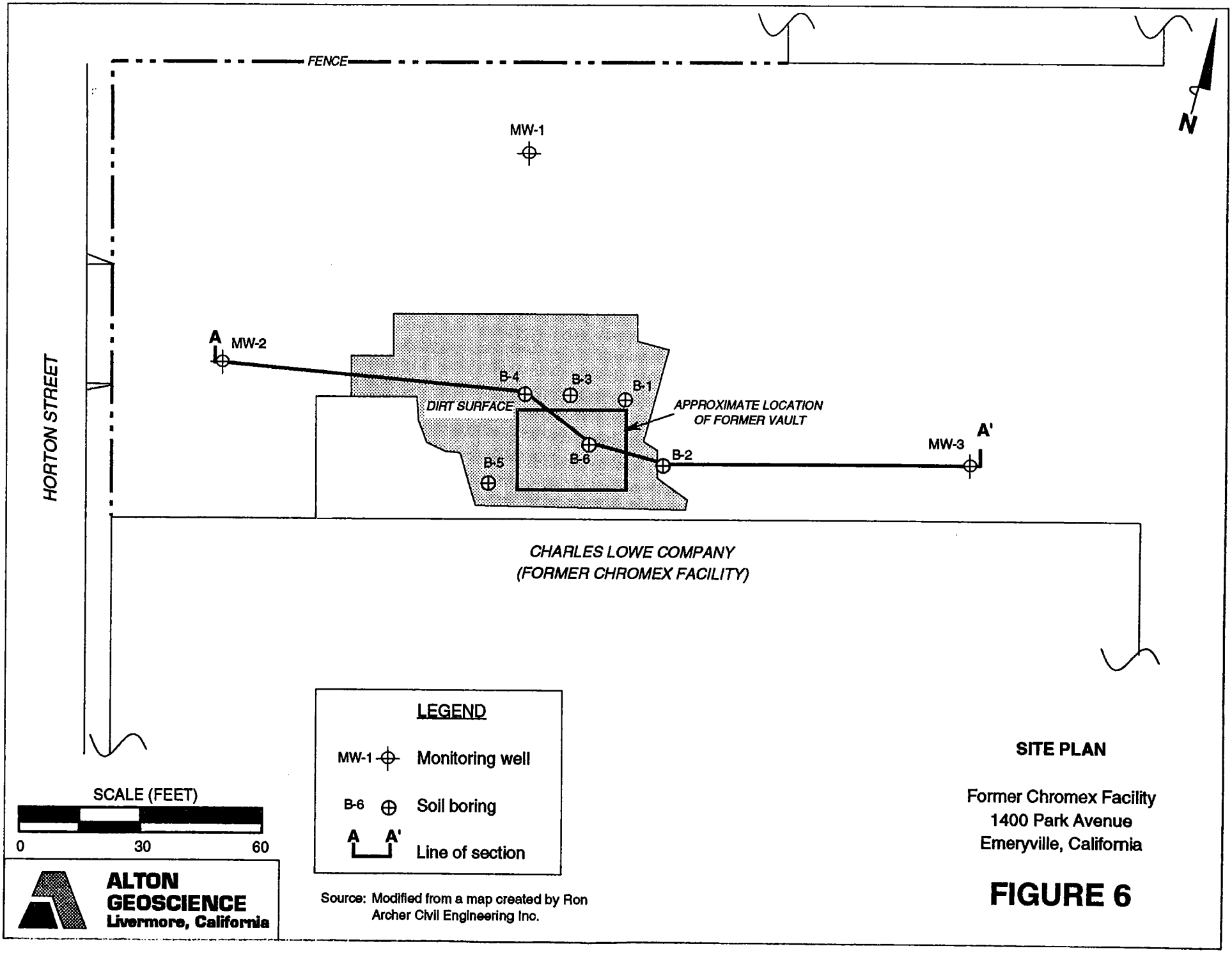
SCALE (feet)
0 50

REGIONAL GROUNDWATER HVOC CONCENTRATIONS

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 5

41-0042/11X17 SITE PLAN 04/21/954



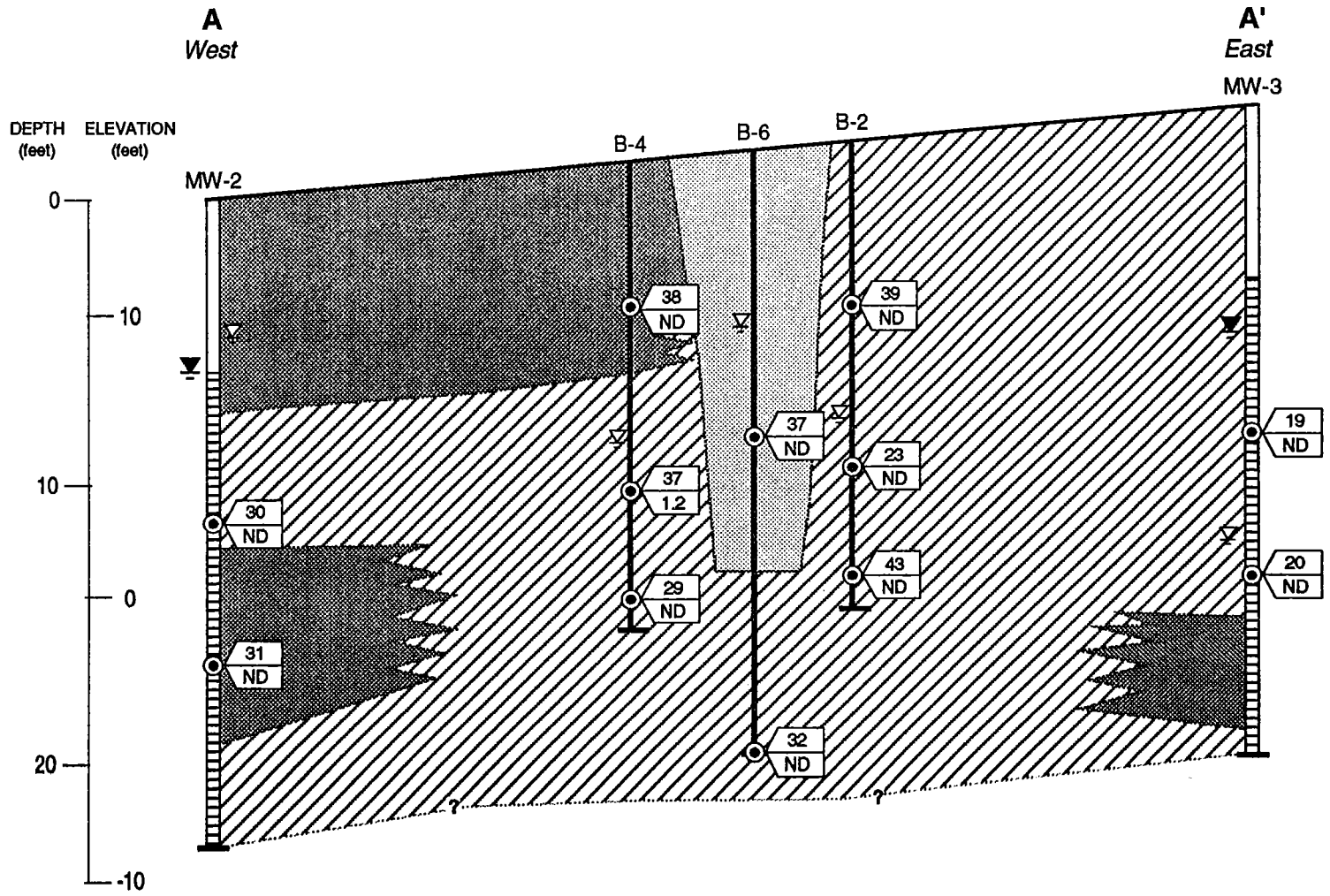
ALTON GEOSCIENCE
Livermore, California

Source: Modified from a map created by Ron Archer Civil Engineering Inc.

SITE PLAN

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 6



10

10

SCALE (feet)

Vertical exaggeration = 25:1

LEGEND

- Gravel fill
- Clayey gravel
- Clay
- Silty clay

ND / ND — Total chromium concentration (ppm) / Hexavalent chromium concentration (ppm)

- Blank
- Screened interval
- First encountered water level 12-20-94
- Stabilized water level as of 12-27-94

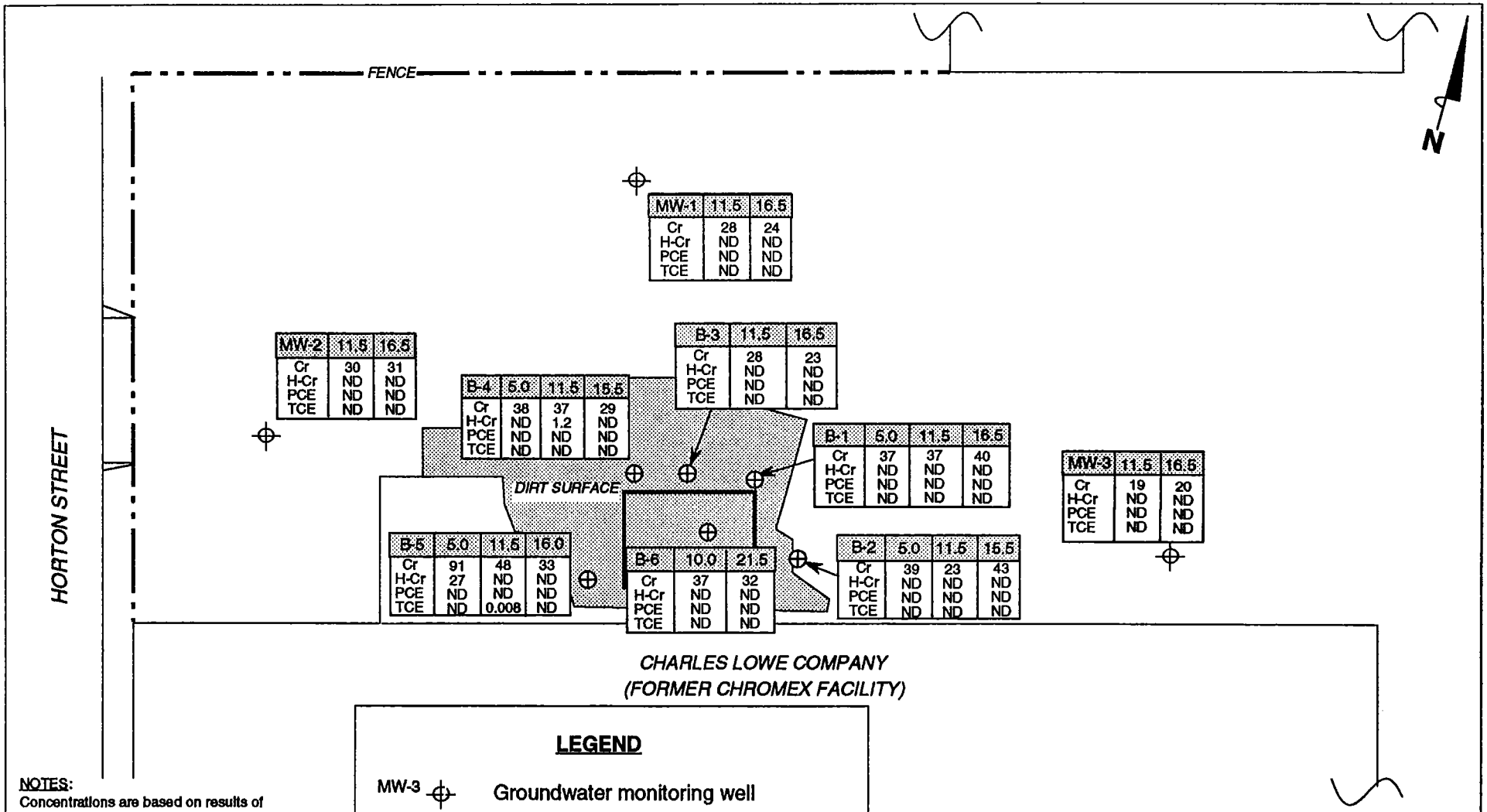
CROSS SECTION A-A'

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 7

ALTON GEOSCIENCE
Livermore, California

41-0042/A-A' 1-18-95



LEGEND

MW-3 ⊕ Groundwater monitoring well

B-6 ⊕ Soil boring

MW-3	Depth
Cr	
H-Cr	
PCE	
TCE	

Adsorbed-phase concentrations in ppm (depth in feet)

NOTES:
Concentrations are based on results of laboratory analysis of soil samples collected December 19 and 20, 1994 and March 17, 1995. ND = not detected at or above method detection limits. Cr = chromium; H-Cr = hexavalent chromium; PCE = tetrachloroethene; TCE = trichloroethene. ppm = parts per million.

SCALE (FEET)

0 30 60

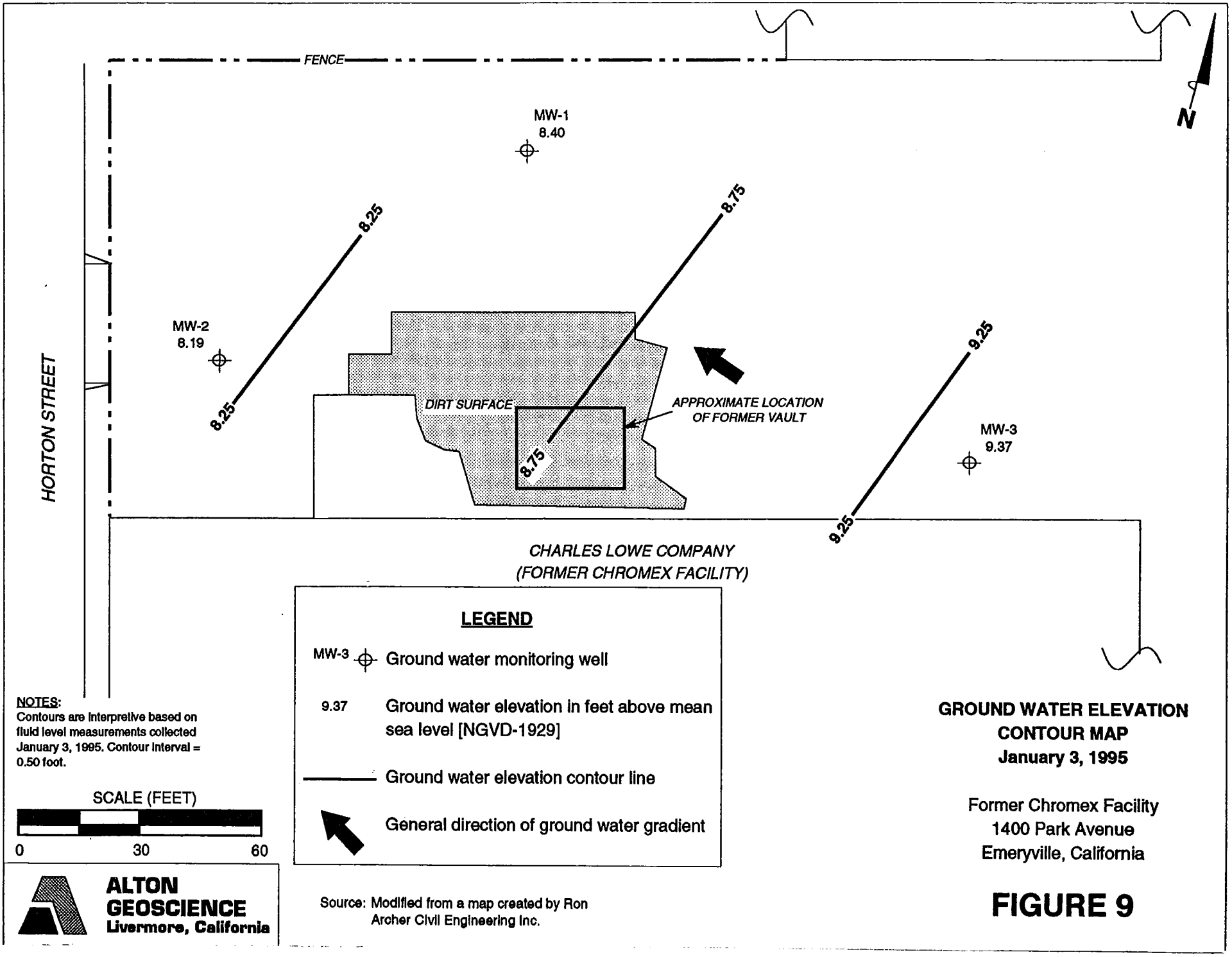
ALTON GEOSCIENCE
Livermore, California

Source: Modified from a map created by Ron Archer Civil Engineering Inc.

ADSORBED-PHASE CONCENTRATIONS
December 19 and 20, 1994 and March 17, 1995

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 8



LEGEND

MW-3 ⊕ Ground water monitoring well

9.37 Ground water elevation in feet above mean sea level [NGVD-1929]

——— Ground water elevation contour line

General direction of ground water gradient

NOTES:
Contours are interpretive based on fluid level measurements collected January 3, 1995. Contour interval = 0.50 foot.

SCALE (FEET)

0 30 60

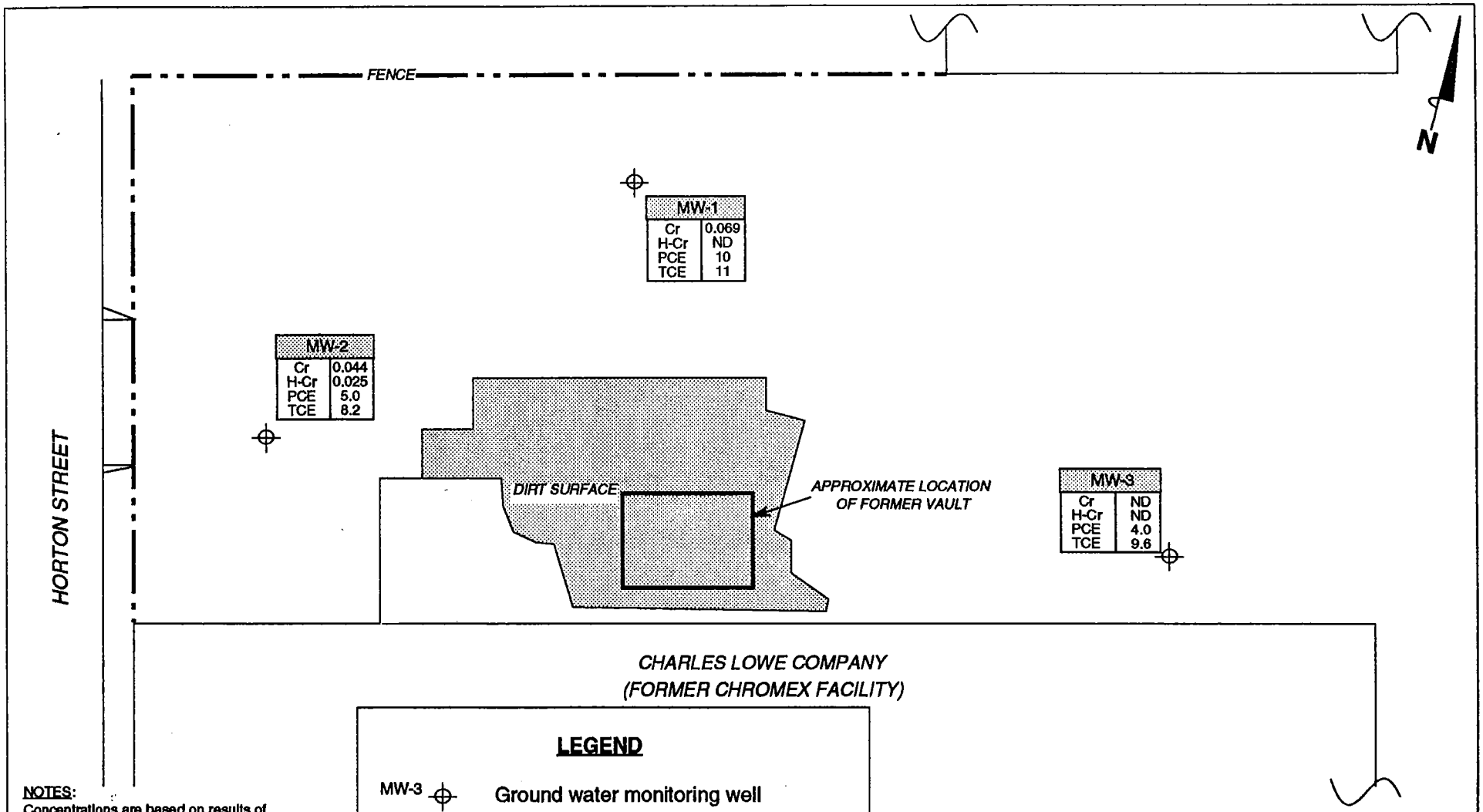
ALTON GEOSCIENCE
Livermore, California

Source: Modified from a map created by Ron Archer Civil Engineering Inc.

GROUND WATER ELEVATION CONTOUR MAP
January 3, 1995

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 9



LEGEND

MW-3 ⊕ Ground water monitoring well

MW-3	
Cr	
H-Cr	
PCE	
TCE	

Dissolved-phase concentrations. Cr and H-Cr are in ppm; PCE and TCE are in ppb.

NOTES:
Concentrations are based on results of laboratory analysis of ground water samples collected December 29, 1994. ND = not detected at or above method detection limits. Cr = chromium; H-Cr = hexavalent chromium; PCE = tetrachloroethene; TCE = trichloroethene. ppb = parts per billion; ppm = parts per million.

SCALE (FEET)

0 30 60

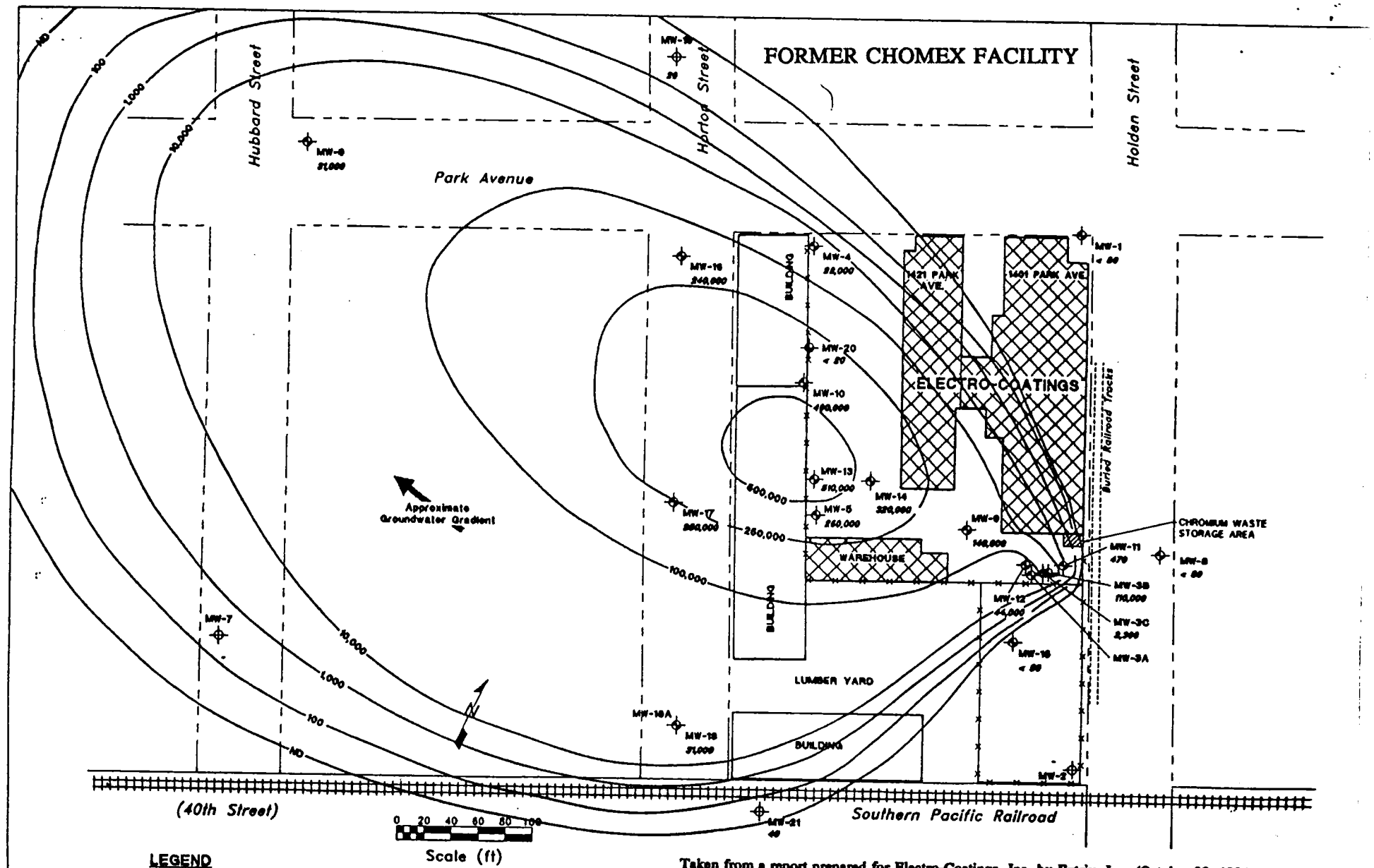
ALTON GEOSCIENCE
Livermore, California

Source: Modified from a map created by Ron Archer Civil Engineering Inc.

DISSOLVED-PHASE CONCENTRATIONS
December 27, 1994

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 10



LEGEND

- Fence or brick wall
- Buildings
- Property Line
- 100,000 Concentration Contour (ug/l)
- Monitoring Wells (found 1991)
- Monitoring Wells (not found 1991)

FIGURE 11

Taken from a report prepared for Electro-Coatings, Inc. by Entrix, Inc. (October 28, 1994)

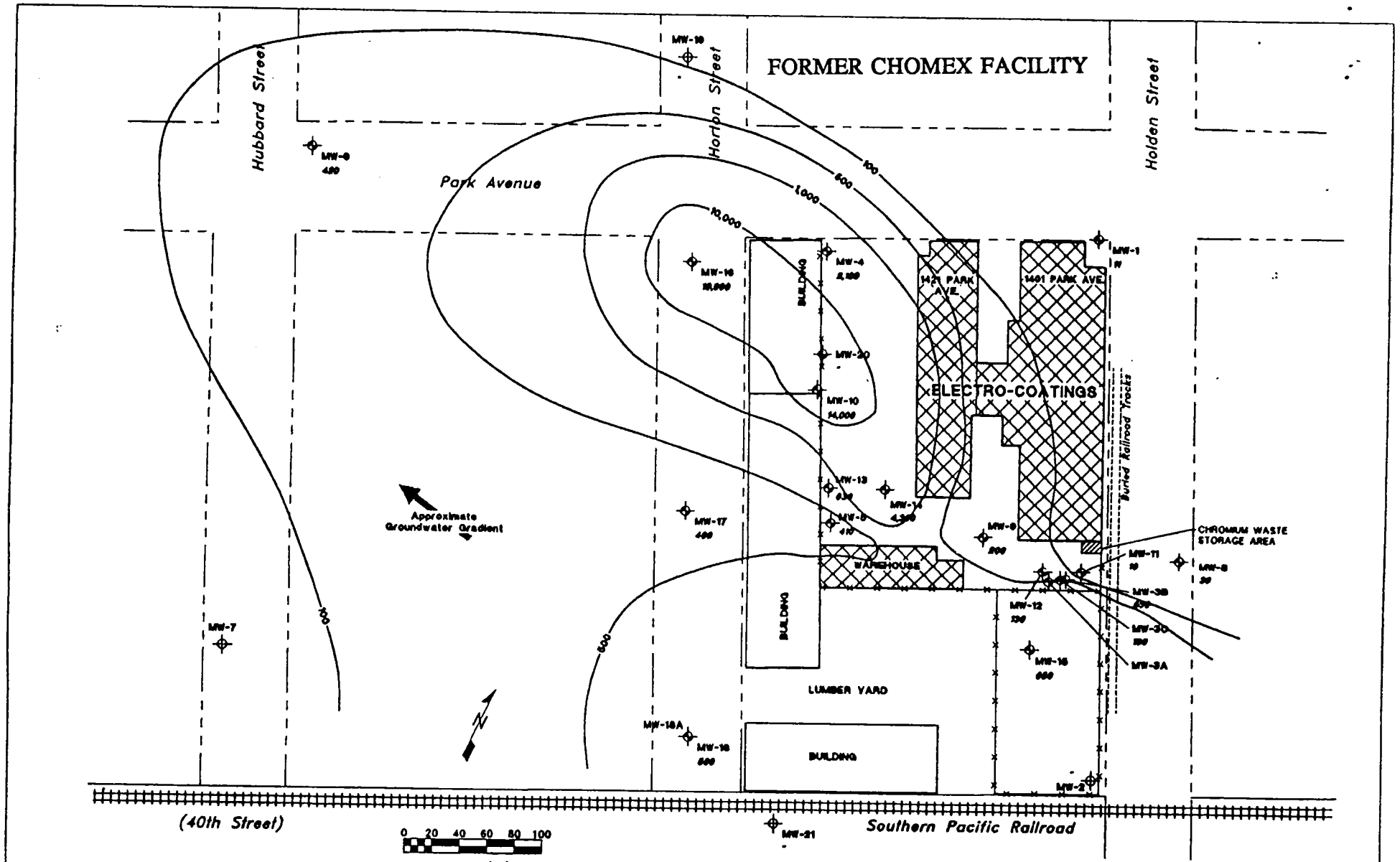
Total Chromium - October and November 1991
1401 and 1421 Park Avenue - Emeryville

Electro-Coatings, Inc.

Emeryville, California

Project: 378402	Draftsperson: RBL
File Name: ECBASE2.DWG	Approved: BM
Creation Date: 10/10/94	Sheet 1 of 1
Revision Date: 10/28/94	
Revision Level 11	

WALNUT CREEK



LEGEND

- Fence or brick wall
- Buildings
- Property Line
- 1,000 — Concentration Contour (ug/l)
- Monitoring Wells (found 1991)
- Monitoring Wells (not found 1991)

FIGURE 12

Taken from a report prepared for Electro-Coatings, Inc. by Entrix, Inc. (October 28, 1994)

Trichloroethylene - October and November 1991
1401 and 1421 Park Avenue - Emeryville

Electro-Coatings, Inc.

Emeryville, California

Project: 376402	Draftsperson: RBL
File Name: ECBASE2.DWG	Approved: SM
Creation Date: 10/10/94	Sheet 1 of 1
Revision Date: 10/28/94	
Revision Level: 1.1	

WALNUT CREEK CALIFORNIA

TABLES

Table 1

Summary of Excel Trans. Soil Sample Analysis
October 1992

Former Chromex Facility

Sample ID	Date	Depth (feet)	Total Chromium (ppm)	Total Lead (ppm)
SO-1	9/22/92	NA	540	7.0
SO-2	9/22/92	NA	1,300	26
B-0	10/1/92	1.0	43	270
	10/1/92	5.0	27	3.5
	10/1/92	10.0	29	3.0
B-1	10/1/92	2.0	2.2	ND
	10/1/92	5.0	46	4.5
	10/1/92	10.0	27	3.8
B-2	10/1/92	1.0	41	11
	10/1/92	5.0	34	4.0
	10/1/92	10.0	40	5.0
B-3	10/1/92	1.0	88	6.5
	10/1/92	5.0	37	3.0
	10/1/92	10.0	29	4.0

NOTES:

ppm = parts per million
NA = not applicable
ND = not detected at or above method detection limit

Table 2

Summary of Alton Geoscience Soil Sample Analysis
December 1994 and March 1995

Former Chromex Facility

Sample ID	Date	Depth (feet)	HVOC (ppb)	Total Chromium (ppm)	Total Lead (ppm)	Hexavalent Chromium (ppm)	PCB (ppm)	TRPH (ppm)
B-1	3/17/95	5.0	ND	37	6.4	ND	—	—
	12/19/94	11.5	ND	37	4.2	ND	—	—
	12/19/94	16.5	ND	40	5.5	ND	—	—
B-2	3/17/95	5.0	ND	39	10	ND	—	—
	12/19/94	11.5	ND	23	4.5	ND	—	—
	12/19/94	15.5	ND	43	5.2	ND	—	—
B-3	12/19/94	11.5	ND	28	5.5	ND	—	—
	12/19/94	16.5	ND	23	7.1	ND	—	—
B-4	3/17/95	5.0	ND	38	6.6	ND	—	—
	12/19/94	11.5	ND	37	5.8	1.2	—	—
	12/19/94	15.5	ND	29	5.1	ND	—	—
B-5	3/17/95	5.0	ND	91	12	27	—	—
	12/19/94	11.5	8.0*	48	4.7	ND	—	—
	12/19/94	16.0	ND	33	3.7	ND	—	—
B-6	12/20/94	10.0	ND	37	10	ND	—	—
	12/20/94	21.5	ND	32	7.2	ND	—	—
MW-1	12/19/94	11.5	ND	28	4.5	ND	—	—
	12/19/94	16.5	ND	24	4.3	ND	—	—
MW-2	12/19/94	11.5	ND	30	5.4	ND	—	—
	12/19/94	16.5	ND	31	3.4	ND	—	—

Table 2

Summary of Alton Geoscience Soil Sample Analysis
December 1994 and March 1995

Former Chromex Facility

Sample ID	Date	Depth (feet)	HVOC (ppb)	Total Chromium (ppm)	Total Lead (ppm)	Hexavalent Chromium (ppm)	PCB (ppm)	TRPH (ppm)
MW-3	12/20/94	6.5	—	—	—	—	ND	43
	12/20/94	11.5	ND	19	4.4	ND	—	—
	12/20/94	16.5	30**	20	9.5	ND	—	—

NOTES:

ppm = parts per million
HVOC = halogenated volatile organic compounds
PCB = polychlorinated biphenyl
TRPH = total recoverable petroleum hydrocarbons
* = trichloroethene
** = cis-1,2-dichloroethene
ppb = parts per billion

Table 3

Summary of Ground Water Monitoring and Analysis

Former Chromex Facility

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Ground Water Elevation (feet)	Total Chromium (ppm)	Total Lead (ppm)	Hexavalent Chromium (ppm)
MW-1	12/27/94	16.71	8.52	8.19	0.069	ND	ND
	1/3/95		8.31	8.40	—	—	—
MW-2	12/27/94	13.99	8.02*	5.97	0.044	ND	0.025
	1/3/95		5.80	8.19	—	—	—
MW-3	12/27/94	17.69	8.62	9.07	ND	ND	ND
	1/3/95		8.32	9.37	—	—	—

NOTES: ppm = parts per million — = not measured/not analyzed
* = anomalous result ND = not detected at or above method detection limit

Table 4

Summary of Ground Water HVOC Analysis

Former Chromex Facility

Well ID	Date	Chlorobenzene (ppb)	cis-1,2-DCE (ppb)	trans- 1,2-DCE (ppb)	PCE (ppb)	Trichloroethene (ppb)
MW-1	12/27/94	1.5	2.5	ND	10	11
MW-2	12/27/94	ND	2.0	ND	5.0	8.2
MW-3	12/27/94	ND	23	0.69	4.0	9.6

NOTES:

HVOC =	halogenated volatile organic compounds	PCE =	tetrachloroethene
ND =	not detected at or above method detection limits	ppb =	parts per billion
DCE =	dichloroethene		

APPENDIX A

GENERAL FIELD PROCEDURES, BORING LOGS, AND WELL CONSTRUCTION DETAILS

GENERAL FIELD PROCEDURES

A description of the general field procedures used during site investigation and monitoring activities is presented below. For an overview of protocol, refer to the appropriate section(s).

DRILLING AND SOIL SAMPLING

Soil borings are drilled using continuous-flight, hollow-stem augers. Borings that are not completed as monitoring wells are grouted to within 5 feet of the ground surface with a cement/bentonite slurry. The remaining 5 feet is filled with concrete.

Soil samples are obtained for soil description, field hydrocarbon vapor screening, and possible laboratory analysis. Soil samples are retrieved from the borings by one of two methods: 1) continuously, using a 5-foot-long, continuous-core barrel sampler advanced into the soil with the lead auger; sample tubes are driven into the core with a mallet, or 2) at 2.5- or 5-foot intervals, using a standard split-spoon sampler lined with four 1.5-inch-diameter stainless steel or brass sample inserts. The split-spoon sampler is driven approximately 18 inches beyond the lead auger with a 140-pound hammer dropped from a height of 30 inches.

For hand auger borings and hand-held, power-driven auger borings, soil samples are retrieved using a hand-driven slide hammer lined with a 1.5-inch-diameter stainless steel sample tube.

During drilling activities, soil adjacent to the laboratory sample is screened for combustible vapors using a combustible gas indicator (CGI) or equivalent field instrument. For each hydrocarbon vapor screening event, a 6-inch-long by 2.5-inch-diameter sample insert is filled approximately 1/3 full with the soil sample, capped at both ends, and shaken. The probe is then inserted through a small opening in the cap, and a reading is taken after approximately 15 seconds and recorded on the boring log. The remaining soil recovered is removed from the sample insert or sampler, and described in accordance with the Unified Soil Classification System. For each sampling interval, field estimates of soil type, density/consistency, moisture, color, and grading are recorded on the boring logs.

SOIL SAMPLE HANDLING

Soil sample handling follows the same basic protocol for both drilling and excavation activities. Upon retrieval, soil samples are immediately removed from the sampler, sealed with Teflon sheeting and polyurethane caps, and wrapped with tape. Each sample is labeled with the project number, boring/well number, sample depth, geologist's initials, and date of collection. After the samples have been labeled and documented in the chain of custody record, they are placed in a cooler with ice at approximately 4 degrees Celsius (°C) prior to and during transport to a state-certified laboratory for analysis. Samples not selected for immediate analysis may be transported in a cooler with ice and archived in a frostless refrigerator at approximately 4°C for possible future testing.

MONITORING WELL INSTALLATION

Monitoring wells are constructed of 4-inch-diameter, flush-threaded Schedule 40 PVC blank and screened (0.020-inch slot size) casing. Where possible, the screened interval will extend at least 10 feet above, and 10 to 20 feet below, the top of the groundwater table. The annular space surrounding the screened casing is backfilled with Sri Supreme # 8 sand (filter pack) to approximately 2 feet above the top of the screened section.

Recovery wells are constructed of 6-inch diameter flush-threaded Schedule 40 PVC blank and screened (0.030-inch slot size) casing. Where possible, the screened interval will extend at least 10 feet above, and 10 to 20 feet below, the top of the groundwater table. The annular space surrounding the screened casing is backfilled with medium aquarium sand (filter pack) to approximately 2 feet above the top of the screened section.

Vapor Extraction wells are constructed of 4-inch diameter flush-threaded Schedule 40 PVC blank and screened (0.030-inch slot size) casing. The annular space surrounding the screened casing is backfilled with medium aquarium sand (filter pack) to approximately 1 feet above the top of the screened section.

During monitoring and recovery well construction, the filter pack is completed by surging with a rig-mounted surge block. A 2 to 3 foot thick bentonite annular seal is placed above the filter pack. The remaining annular space is grouted with Portland cement and/or bentonite grout to the surface. Utility access boxes are installed slightly above grade. Locking, watertight caps are installed to prevent unauthorized access to the well, and limit infiltration of surface fluids.

FLUID LEVEL MONITORING

Fluid levels are monitored in the wells using an electronic interface probe with conductance sensors. The presence of liquid-phase hydrocarbons is verified using a hydrocarbon-reactive paste. The depth to liquid-phase hydrocarbons and water is measured relative to the well box top or top of casing. Well box or casing elevations are surveyed to within 0.02 foot relative to a county or city bench mark.

GROUNDWATER PURGING AND SAMPLING

Groundwater monitoring wells are purged and sampled in accordance with standard regulatory protocol. Typically, monitoring wells that contain no liquid-phase hydrocarbons are purged of groundwater prior to sampling so that fluids sampled are representative of fluids within the formation. Temperature, pH, and specific conductance are typically measured after each well casing volume has been removed. Purging is considered complete when these parameters vary less than 10% from the previous readings, or when four casing volumes of fluid have been removed. Samples are collected without further purging if the well does not recharge within 2 hours to 80% of its volume before purging. The purged water is either pumped directly into a licensed vacuum truck or temporarily stored in labeled drums prior to transport to an appropriate treatment or recycling facility. If an automatic recovery system (ARS) is operating at the site, purged water may be pumped into the ARS for treatment.

Groundwater samples are collected by lowering a 1.5-inch-diameter, bottom-fill, disposable polyethylene bailer just below the static water level in the well. The samples are carefully transferred from the check-valve-equipped bailer to 1-liter and 40-milliliter glass containers. The sample containers are filled to zero headspace and fitted with Teflon-sealed caps. Each sample is labeled with the project number, well number, sample date, and sampler's initials. Samples remain chilled at approximately 4°C prior to analysis by a state-certified laboratory.

CHAIN OF CUSTODY PROTOCOL

Chain of custody protocol is followed for all soil and groundwater samples selected for laboratory analysis. The chain of custody form(s) accompanies the samples from the sampling locality to the laboratory, providing a continuous record of possession prior to analysis.

DECONTAMINATION

Drilling and Soil Sampling

Drilling equipment is decontaminated by steam cleaning before being brought onsite. The augers are also steam cleaned before each new boring is commenced. Prior to use, the sampler and sampling tubes are brush-scrubbed in a Liqui-nox and potable water solution and rinsed twice in clean potable water. Sampling equipment and tubes are also decontaminated before each sample is collected to avoid cross-contamination between borings.

Groundwater Sampling

Purging and sampling equipment that could contact well fluids is either dedicated to a particular well or cleaned prior to each use in a Liqui-nox solution followed by two tap water rinses.

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			TYPICAL NAMES	
COARSE-GRAINED SOILS MORE THAN HALF IS LARGER THAN No. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN No. 4 SIEVE SIZE	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
			GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES
		GRAVELS WITH OVER 12% FINES	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN No. 4 SIEVE SIZE	CLEAN SANDS WITH LITTLE OR NO FINES	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
			SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS, SAND-SILT MIXTURES
			SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE-GRAINED SOILS MORE THAN HALF IS SMALLER THAN No. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW- TO MEDIUM-PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM- TO HIGH-PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			Pt	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

SYMBOLS AND NOTES

- SAMPLE INTERVAL
- SAMPLE NOT RECOVERED
- BENTONITE
- CONCRETE
- GROUT
- FILTER SAND PACK
- STATIC WATER LEVEL
- WATER LEVEL ENCOUNTERED WHEN DRILLING

ppm = parts per million (mg/kg)
ppb = parts per billion (µg/kg)
ND = not detected at detection limits stated in official laboratory reports
CGI = combustible gas indicator
OVA = organic vapor analyzer
PID = photoionization detector
LEL = lower explosive limit
TPH = total petroleum hydrocarbons
TRPH = total recoverable petroleum hydrocarbons
NA = not applicable

ALTON GEOSCIENCE
Livermore, California

KEY TO BORING LOG

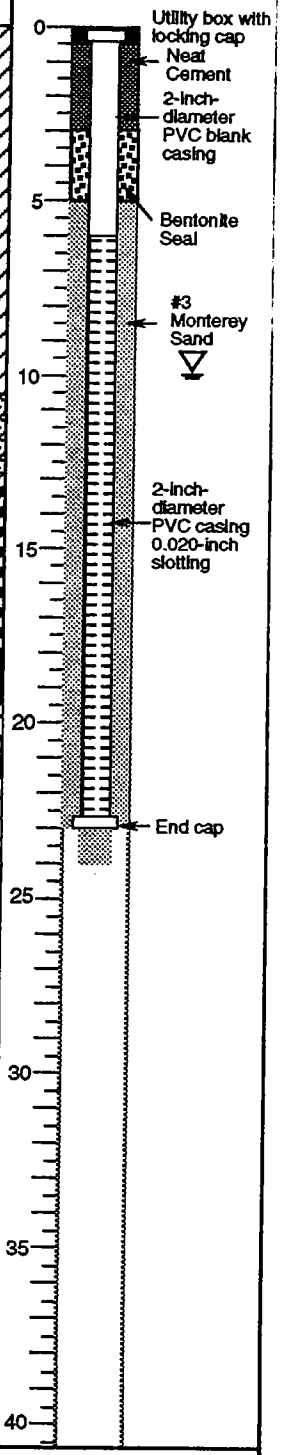
PROJECT NO.: 41-0042
LOCATION: Former Chromex Facility
1400 Park Avenue
Emeryville, California

DATE DRILLED: 12/19/94
LOGGED BY: A. Le May
APPROVED BY: M. Katen, RG
DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow-Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 24.0 feet DEPTH TO WATER: 10.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 4.0 feet.	CL	
5,9,12	5			5	SANDY CLAY: olive brown, soft, damp, contains thin layers (1.0 inch thick) of clayey gravel.		
				10	As above to 10.5 feet.		
9,11,16	5	28/ND			CLAYEY SAND: very dark grayish brown, medium dense, saturated, clasts to 1.5 inches.	SC	
						GC	
12,15,16	5	24/ND		15	CLAYEY GRAVEL: dark olive brown, medium dense, saturated, rounded and angular clasts to 0.75 inch.		
10,11,15	5						
15,16,19	—				GRAVEL: olive brown, coarse, well graded, angular clasts to 0.5 inch-diameter	GW	
12,15,19	4			20	SANDY CLAY: black, medium stiff, damp, fine-grained sand for 10.0 inches	CL	
					GRAVEL: black, coarse, well graded, angular clasts to 0.5 inch.	GW	
—	3				SANDY CLAY: black, medium stiff, damp, with interbedded coarse gravel.	CL	
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

MW-1
PAGE 1 OF 1

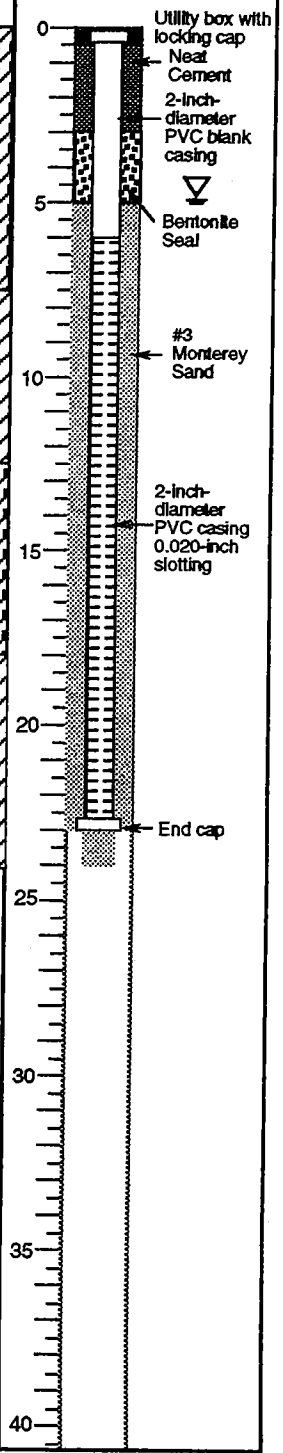
41/-0042/MW-1 01/19/95

PROJECT NO.: 41-0042	DATE DRILLED: 12/19/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow-Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 24.0 feet DEPTH TO WATER: 5.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 3.0 feet.	GC	
5,13,15	4			5	CLAYEY GRAVEL: olive brown, medium dense, saturated sample interval, includes 6.0 inch sandy layer, olive brown.		
10,11,15	4	30/ND		10	SANDY CLAY: olive brown, medium stiff, wet, fine-grained with occasional clasts of gravel.	CL	
18,18,21	4	31/ND		15	CLAYEY GRAVEL: olive brown, medium dense, wet, angular clasts to 1.0 inch-diameter.	GC	
10,15,16	4				SANDY CLAY: olive brown, medium stiff, saturated, fine-grained with silt.	CL	
—	4			20	Light olive brown, damp, contains small rounded clasts of gravel.		
10,16,19	4				SILTY CLAY: black, medium stiff, saturated, with 5.0 inch gravel layer in sample interval, bottom few inches is sandy clay, light olive brown.		
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

MW-2

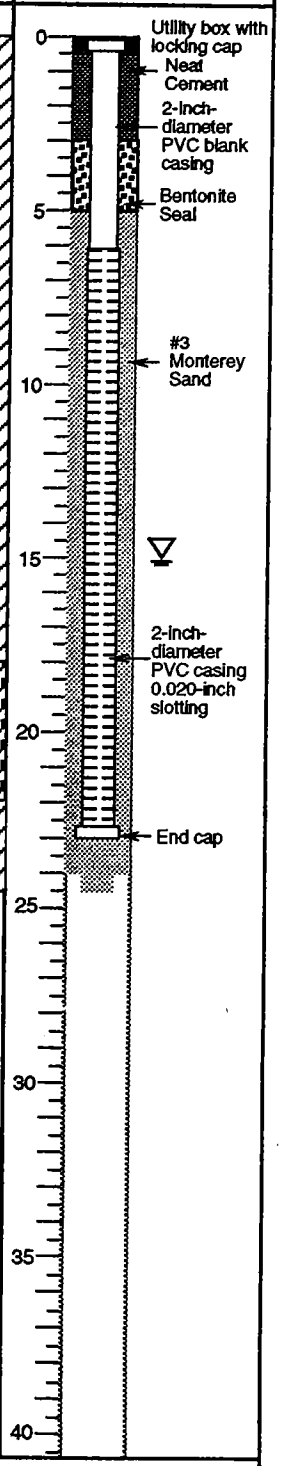
41/-0042/MW-2 01/18/95

PROJECT NO.: 41-0042
LOCATION: Former Chromex Facility
1400 Park Avenue
Emeryville, California

DATE DRILLED: 12/20/94
LOGGED BY: A. Le May
APPROVED BY: M. Katen, RG
DRILLING CO.: BC2

DRILLING METHOD: 8-Inch Hollow-Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 24.5 feet DEPTH TO WATER: 15.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS
				0	Hand-augered to 4.0 feet.	
4,11,12	64			5	SANDY CLAY: black, soft, damp, fine-grained sand with silt.	
6,9,15	48	19/ND		10	GRAVELLY CLAY: olive gray, soft, damp, small angular clasts of gravel, contains 1.0 inch thick layer of brownish yellow clayey sand.	CL
11,15,18	28	20/ND		15	SANDY CLAY: light olive brown, medium stiff, saturated, very fine-grained sand, with silt, interbedded with gravel and black clay each up to 6.0 inches thick.	
12,17,18	20			20	CLAYEY GRAVEL: dark yellowish brown, medium dense, saturated, with clasts to 0.15 inch and sandy clay layers.	GC
—	34			25	GRAVELLY CLAY: black, saturated, with clasts to 0.15 inch-diameter and fine sand.	CL
				30		
				35		
				40		



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

MW-3
PAGE 1 OF 1

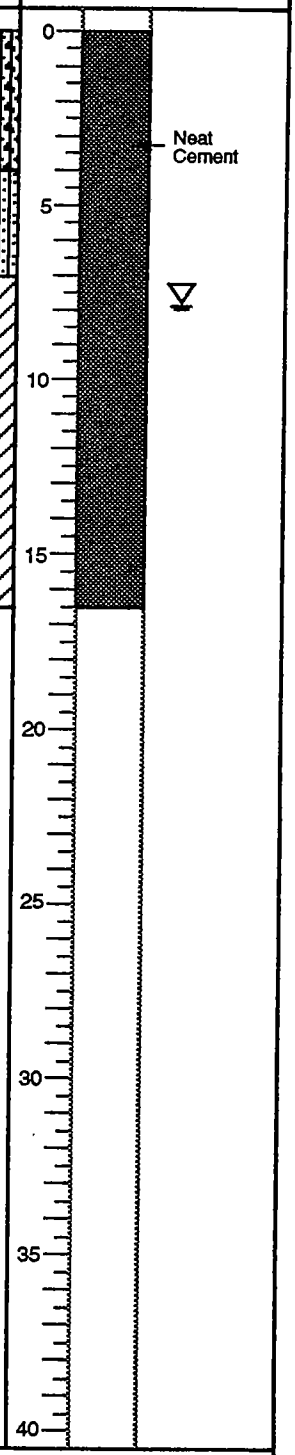
PROJECT NO.: 41-0042	DATE DRILLED: 12/19/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 16.5 feet DEPTH TO WATER: 8.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS
				0	Hand-augered to 4.0 feet.	
16,11	5				SILTY GRAVEL: olive brown, wet from surface	GM
7,9,12	6	37/ND		5	SILTY SAND: dark yellowish brown, very soft, damp, with angular gravel clasts to 1.0 inch.	SM
4,6,15	7				SANDY CLAY: brown, wet, contains occasional small angular gravel clasts to 0.5 inch-diameter.	CL
5,5,11	9	37/ND		10	Olive brown, saturated small layers of clayey sand up to 0.5 inch thick.	
6,9,12	10				With silt.	
7,12,15	12	40/ND		15	Damp, bottom 1.0 inch is gravelly clay with large pebbles and fine sand.	
				20	* NOTE: Laboratory result reported for the 5 foot sample represents a soil sample collected by hand auger on March 17, 1995, immediately adjacent to the original boring drilled on December 19, 1995.	
				25		
				30		
				35		
				40		

LITHOLOGY

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

B-1

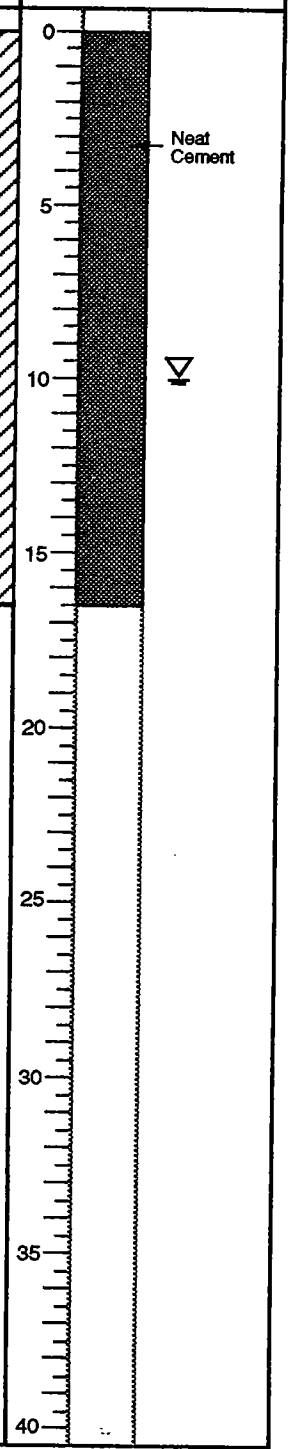
41-0042/B-1 01/11/95

PROJECT NO.: 41-0042	DATE DRILLED: 12/19/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 16.5 feet DEPTH TO WATER: 10.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 4.0 feet.	CL	
3,6,9	8	39/ND		5	SILTY CLAY: very dark gray, moist, contains small gravel clasts to 0.15 inch, sample interval contains 0.25 inch thick layer of fine clayey sand.		
7,11,12	12	23/ND		10	SANDY CLAY: dark olive brown, wet, contains thin layers of clayey sand and gravel to 1.0 inch thick.		
8,9,12	10	43/ND		15	CLAY: olive, damp, with angular gravel clasts, fines downward to homogeneous very fine clay in bottom 6.0 inches of sample interval.		
				20	* NOTE: Laboratory result reported for the 5 foot sample represents a soil sample collected by hand auger on March 17, 1995, immediately adjacent to the original boring drilled on December 19, 1995.		
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

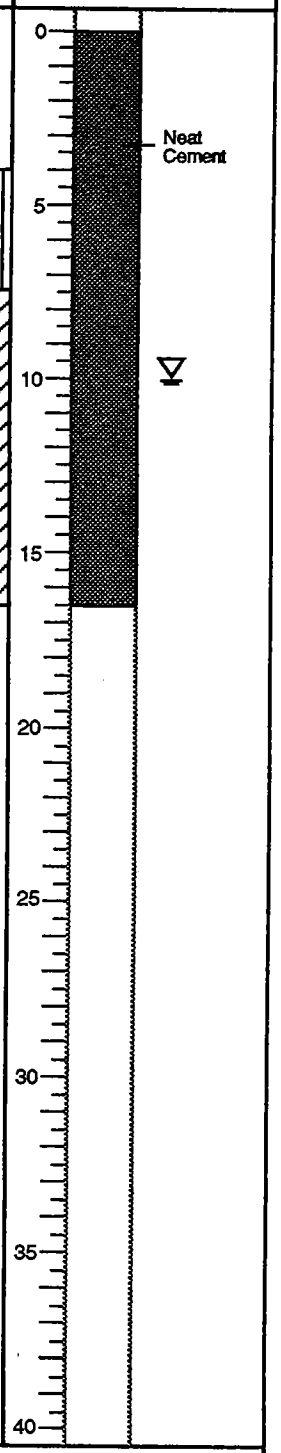
B-2
PAGE 1 OF 1

PROJECT NO.: 41-0042	DATE DRILLED: 12/19/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 16.5 feet DEPTH TO WATER: 10.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 4.0 feet. GRAVEL (Fill)	Fill	
9,11,15	5			5	CLAYEY SILT: mottled black and dark olive brown, moist, contains gravel clasts to 0.25 inch-diameter and clayey gravel layer for top 6.0 inches of sample interval.	ML	
7,7,8	4	28/ND		10	SANDY CLAY: olive brown, saturated, fine sand.	CL	
9,10,2	9	23/ND		15	Fine sand and occasional small gravel clasts to 0.15 inch-diameter.		
				20			
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

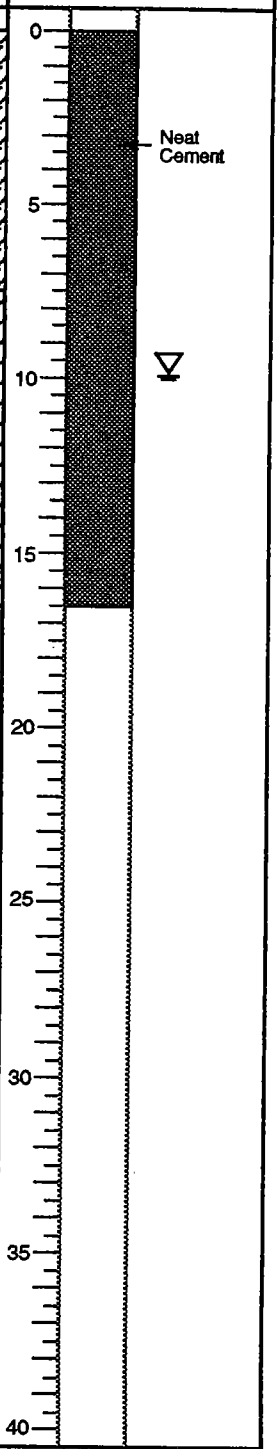
B-3
PAGE 1 OF 1

PROJECT NO.: 41-0042	DATE DRILLED: 12/19/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 16.5 feet DEPTH TO WATER: 10.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 4.0 feet.	GC	
4,3,6	36	38/ND		5	CLAYEY GRAVEL: dark olive brown, damp, contains oxidized angular clasts to 1.0 inch-diameter, with silt.		
						CL	
5,5,12	20	37/1.2		10	SANDY CLAY: olive brown, wet, fine-grained sand, contains layer of clayey gravel (1.0 inch thick) which is mottled black.		
7,9,11	8	29/ND		15	Very dark grayish brown, saturated, fine sand with trace angular gravel clasts and thin layer of coarse clayey sand in sample interval.		
				20	* NOTE: Laboratory result reported for the 5 foot sample represents a soil sample collected by hand auger on March 17, 1995, immediately adjacent to the original boring drilled on December 19, 1995.		
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

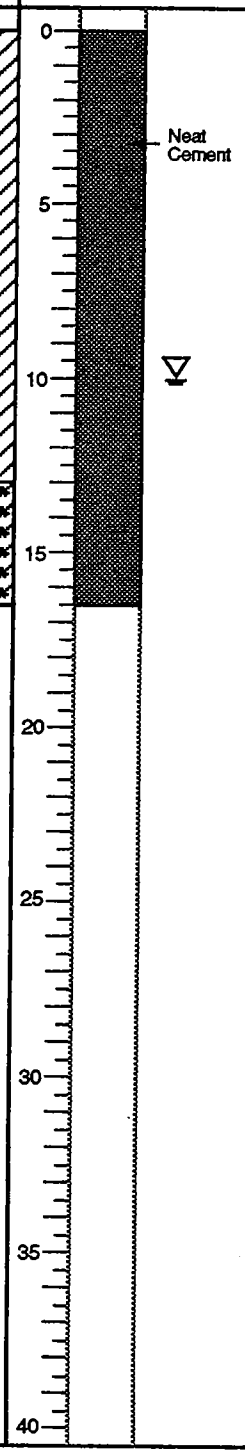
B-4
PAGE 1 OF 1

PROJECT NO.: 41-0042	DATE DRILLED: 12/19/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 16.5 feet DEPTH TO WATER: 10.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 4.0 feet.		
4,6,11	7	91/27		5	SANDY CLAY: very dark grayish brown, stiff, damp, 1.0 inch-thick clayey gravel layer at 5.0 feet below grade.	CL	
7,7,9	8	48/ND		10	Dark grayish brown, saturated, fine sand.		
6,8,11	5	33/ND		15	CLAYEY GRAVEL: dark grayish brown, saturated, angular clasts to 1.0 inch-diameter, sample interval includes clay layer approximately 1.0 inch thick.	GC	
				20	* NOTE: Laboratory result reported for the 5 foot sample represents a soil sample collected by hand auger on March 17, 1995, immediately adjacent to the original boring drilled on December 19, 1995.		
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

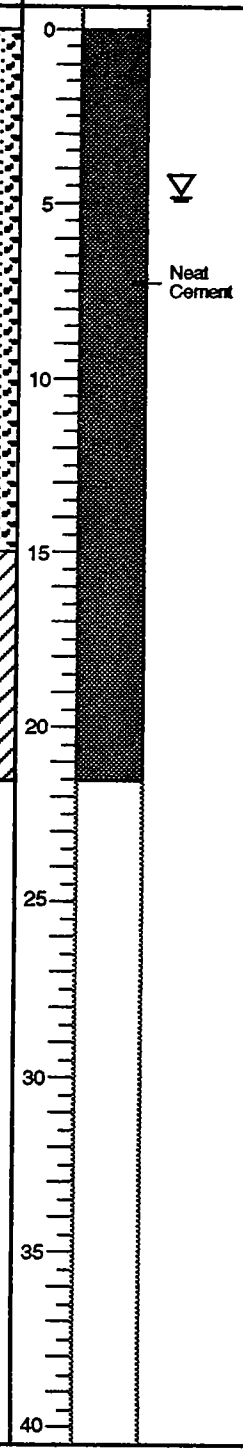
B-5
PAGE 1 OF 1

PROJECT NO.: 41-0042	DATE DRILLED: 12/20/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 21.5 feet DEPTH TO WATER: 5.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 3.0 feet.	Fill	
5,8,12	—			5	GRAVEL: dark yellowish brown, saturated, coarse gravel fill, no PID reading, not enough material.		
9,11,15	—	37/ND		10			
15,18,20	10			15	GRAVELLY CLAY: gravel fill and clay.	CL	
7,12,9	10	32/ND		20	Dark yellowish brown, contains angular clasts to 0.25 inch-diameter.		
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

B-6

41-0042/B-6 01/11/95

APPENDIX B

OFFICIAL LABORATORY REPORTS AND CHAIN OF CUSTODY RECORDS

Sequoia Analytical

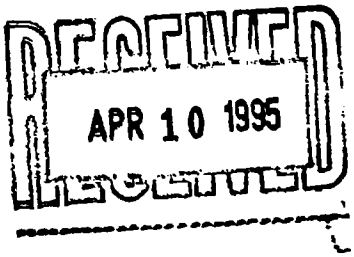
680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled: Mar 17, 1995
30-A Lindbergh Ave.	Sample Descript:	Soil, B-1 (5')	Received: Mar 17, 1995
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed: Mar 21, 1995
Attention: Kevin Keenan	Lab Number:	503-0794	Reported: Mar 28, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.



SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-2 (5')
Analysis Method: EPA 5030/8010
Lab Number: 503-0795

Sampled: Mar 17, 1995
Received: Mar 17, 1995
Analyzed: Mar 21, 1995
Reported: Mar 28, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled: Mar 17, 1995
30-A Lindbergh Ave.	Sample Descript:	Soil, B-4 (5')	Received: Mar 17, 1995
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed: Mar 21, 1995
Attention: Kevin Keenan	Lab Number:	503-0796	Reported: Mar 28, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled: Mar 17, 1995
30-A Lindbergh Ave.	Sample Descript:	Soil, B-5 (5')	Received: Mar 17, 1995
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed: Mar 21, 1995
Attention: Kevin Keenan	Lab Number:	503-0797	Reported: Mar 28, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-1 (5')

Lab Number: 503-0794

Sampled: Mar 17, 1995
Received: Mar 17, 1995
Extracted: Mar 20-21, 1995
Analyzed: Mar 22, 1995
Reported: Mar 28, 1995

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	37
Lead	1.0	6.4
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-2 (5')

Lab Number: 503-0795

Sampled: Mar 17, 1995
Received: Mar 17, 1995
Extracted: Mar 20-21, 1995
Analyzed: Mar 22, 1995
Reported: Mar 28, 1995

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	39
Lead	1.0	10
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

5030794.ALT <6>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-4 (5')

Lab Number: 503-0796

Sampled: Mar 17, 1995
Received: Mar 17, 1995
Extracted: Mar 20-21, 1995
Analyzed: Mar 22, 1995
Reported: Mar 28, 1995

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	38
Lead	1.0	6.6
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-5 (5')

Lab Number: 503-0797

Sampled: Mar 17, 1995
Received: Mar 17, 1995
Extracted: Mar 20-21, 1995
Analyzed: Mar 22, 1995
Reported: Mar 28, 1995

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	91
Lead	1.0	12
Hexavalent Chromium	0.50	27

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 5030794-97

Reported: Mar 28, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Chromium	Lead	Hexavalent Chromium
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 6010	EPA 6010	EPA 7196
Analyst:	K. Nill	K. Nill	K. Nill	K. Anderson	K. Anderson	S. Phillips
MS/MSD Batch#:	5030579	5030579	5030579	5030792	5030792	5030797
Date Prepared:	3/21/95	3/21/95	3/21/95	3/20/95	3/20/95	3/21/95
Date Analyzed:	3/21/95	3/21/95	3/21/95	3/22/95	3/22/95	3/22/95
Instrument I.D.#:	HP5890/7	HP5890/7	HP5890/7	Liberty-100	Liberty-100	Spec-340
Conc. Spiked:	10 µg/kg	10 µg/kg	10 µg/kg	50 mg/kg	50 mg/kg	100 mg/kg
Matrix Spike % Recovery:	77	49	76	106	92	108
Matrix Spike Duplicate % Recovery:	72	38	75	100	94	124
Relative % Difference:	6.7	25	1.3	5.8	2.2	14

LCS Batch#:	LCS032195	LCS032195	LCS032195	BLK032095	BLK032095	BLK032195
Date Prepared:	3/21/95	3/21/95	3/21/95	3/20/95	3/20/95	3/21/95
Date Analyzed:	3/21/95	3/21/95	3/21/95	3/22/95	3/22/95	3/22/95
Instrument I.D.#:	HP5890/7	HP5890/7	HP5890/7	Liberty-100	Liberty-100	Spec-340
LCS % Recovery:	107	102	95	100	91	106
% Recovery Control Limits:	28-167	35-146	38-150	75-125	75-125	60-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Consulting Firm: ALTON GEOSCIENCE
Address: 30A Lindbergh Ave
City: Livermore State: CA Zip: 94550
Tel: 510 606 9150 Fax.: 510 606 9260

Station No./Site Address: FORMER CHROMEX
Project Contact: KEVIN KEENAN
Mobile/Other: N/A phone 277
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010 HVOC	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	7196 Hex Cr	LUFT 5 Pb
B1-(5')	Soil	3-17	1:54 pm	—	1	Steel tube		5030794				X									X	X
B-2 (5')			11:00	—				5030795				X									X	X
B-4 (5')			12:03	—				5030796				X									X	X
B-5 (5')			11:45	—				5030797				Y									X	Y
SP-1				—																		
SP-2				—																		
SP-3				—																		
SP-4				—																		

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 4:10 3-17-95
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished in lab by: RD Kelley Date/Time: 3/17/95 4:10 pm

Remarks:

Turnaround Time: (check one)
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact Y On Ice Y

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-1(11.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1281

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2 Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

RECEIVED
JAN 26 1995

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121281.ALT <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled:	Dec 19, 1994
30-A Lindbergh Ave.	Sample Descript:	Soil, B-1(16.5)	Received:	Dec 19, 1994
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed:	Dec 28, 1994
Attention: Kevin Keenan	Lab Number:	412-1282	Reported:	Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-2(11.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1283

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-2(15.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1284

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-3(11.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1285

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-3(16.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1286

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled:	Dec 19, 1994
30-A Lindbergh Ave.	Sample Descript:	Soil, B-4(11.5)	Received:	Dec 19, 1994
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed:	Dec 28, 1994
Attention: Kevin Keenan	Lab Number:	412-1287	Reported:	Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled: Dec 19, 1994
30-A Lindbergh Ave.	Sample Descript:	Soil, B-4(15.5)	Received: Dec 19, 1994
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed: Dec 28, 1994
Attention: Kevin Keenan	Lab Number:	412-1288	Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121281.ALT <8>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-5(11.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1289

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	8.0
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121281.ALT <9>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-5(16.0)
Analysis Method: EPA 5030/8010
Lab Number: 412-1290

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121281.ALT <10>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil
Analysis for: Chromium
First Sample #: 412-1281

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Extracted: Dec 27, 1994
Analyzed: Dec 27, 1994
Reported: Dec 30, 1994

LABORATORY ANALYSIS FOR: Chromium

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
412-1281	B-1(11.5)	0.50	37
412-1282	B-1(16.5)	0.50	40
412-1283	B-2(11.5)	0.50	23
412-1284	B-2(15.5)	0.50	43
412-1285	B-3(11.5)	0.50	28
412-1286	B-3(16.5)	0.50	23
412-1287	B-4(11.5)	0.50	37
412-1288	B-4(15.5)	0.50	29
412-1289	B-5(11.5)	0.50	48
412-1290	B-5(16.0)	0.50	33

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121281.ALT <11>

5

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil
Analysis for: Lead
First Sample #: 412-1281

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Extracted: Dec 27, 1994
Analyzed: Dec 27, 1994
Reported: Dec 30, 1994

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
412-1281	B-1(11.5)	1.0	4.2
412-1282	B-1(16.5)	1.0	5.5
412-1283	B-2(11.5)	1.0	4.5
412-1284	B-2(15.5)	1.0	5.2
412-1285	B-3(11.5)	1.0	5.5
412-1286	B-3(16.5)	1.0	7.1
412-1287	B-4(11.5)	1.0	5.8
412-1288	B-4(15.5)	1.0	5.1
412-1289	B-5(11.5)	1.0	4.7
412-1290	B-5(16.0)	1.0	3.7

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil
Analysis for: Hexavalent Chromium
First Sample #: 412-1281

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Extracted: Dec 20, 1994
Analyzed: Dec 20, 1994
Reported: Dec 30, 1994

LABORATORY ANALYSIS FOR: Hexavalent Chromium

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
412-1281	B-1(11.5)	0.50	N.D.
412-1282	B-1(16.5)	0.50	N.D.
412-1283	B-2(11.5)	0.50	N.D.
412-1284	B-2(15.5)	0.50	N.D.
412-1285	B-3(11.5)	0.50	N.D.
412-1286	B-3(16.5)	0.50	N.D.
412-1287	B-4(11.5)	0.50	1.2
412-1288	B-4(15.5)	0.50	N.D.
412-1289	B-5(11.5)	0.50	N.D.
412-1290	B-5(16.0)	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121281.ALT <13>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 4121281-90

Reported: Jan 12, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 8010	EPA 8010	EPA 8010
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD Batch#:	4121281	4121281	4121281	4121281	4121281	4121281
Date Prepared:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Date Analyzed:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6
Conc. Spiked:	10 µg/kg	10 µg/kg	10 µg/kg	10 µg/kg	10 µg/kg	10 µg/kg
Matrix Spike % Recovery:	76	121	105	75	112	102
Matrix Spike Duplicate % Recovery:	64	108	98	78	115	103
Relative % Difference:	17	11	6.9	3.9	2.6	0.98
LCS Batch#:	LCS122894	LCS122894	LCS122894	LCS122994	LCS122994	LCS122994
Date Prepared:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Date Analyzed:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6
LCS % Recovery:	99	105	96	84	101	94
% Recovery Control Limits:	28-167	35-146	38-150	28-167	35-146	38-150

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 4121281-90

Reported: Jan 12, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Chromium	Lead	Hexavalent Chromium	Hexavalent Chromium
Method:	EPA 6010	EPA 6010	EPA 7196	EPA 7196
Analyst:	J. Dinsay	J. Dinsay	M. Nguyen	M. Nguyen
MS/MSD Batch#:	4121280	4121280	4121286	4121290
Date Prepared:	12/27/94	12/27/94	12/20/94	12/20/94
Date Analyzed:	12/27/94	12/27/94	12/20/94	12/20/94
Instrument I.D.#:	Liberty-100	Liberty-100	Spec-340	Spec-340
Conc. Spiked:	50 mg/kg	50 mg/kg	5.0 mg/kg	5.0 mg/kg
Matrix Spike % Recovery:	98	89	95	108
Matrix Spike Duplicate % Recovery:	100	87	106	110
Relative % Difference:	2.0	2.3	11	1.8
LCS Batch#:	BLK122794	BLK122794	BLK122094	BLK122094
Date Prepared:	12/27/94	12/27/94	12/20/94	12/20/94
Date Analyzed:	12/27/94	12/27/94	12/20/94	12/20/94
Instrument I.D.#:	Liberty-100	Liberty-100	Spec-340	Spec-340
LCS % Recovery:	102	98	101	101
% Recovery Control Limits:	75-125	75-125	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☒ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Consulting Firm: ALTON GEOSCIENCE
Address: 30A HUDBERG AVE
City: LIVERMORE State: CA Zip: 94550
Tel: 510 606 9150 Fax.: 510 606 9260

Station No./Site Address: Former Chromex
Project Contact: Kevin Keenan
Mobil Oil Engineer:
PO# 426377
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010 HVOC	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	606 Chromium Lead	7196 Hexavalent Chromium
B-3 (6.0)	Soil	12-19	9:20	—	1	Steel tube				HOLD			D									
B-3 (11.5)			9:30	—	1							X	~~X~~		4121285						X	X
B-3 (16.5)			9:35	—	1							X	~~X~~		4121286						X	X
B-4 (5.5)			11:10	—	1					HOLD												
B-4 (11.5)			11:15	—	1							X			4121287						X	X
B-4 (15.5)			11:20	—	1							X			4121288						X	X
B-5 (6.5)			12:45	—	1					HOLD												
B-5 (11.5)			12:50	—	1							X			4121289						X	X
B-5 (16.0)			12:53	—	1							X			4121290						X	X

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 12-19-94 3:25
Relinquished by: Date/Time: 12-19-94 4:55
Relinquished by: Date/Time:

Relinquished by: Date/Time: 12-19-94 3:25
Relinquished by: Date/Time:
~~Relinquished~~ in Lab by: Recieved Date/Time: 12/19/94 4:55

Turnaround Time: (check one):
Normal X Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity:
Intact X On Ice X

Remarks: Hexavalent chromium - Will phone in P.O. #

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Consulting Firm: ALTON GEOSCIENCE
Address: 30A Lindbergh Ave
City: Livermore State: CA Zip: 94550
Tel: (510) 606 9150 Fax.: (510) 606 9260

Station No./Site Address: Former Chromex
Project Contact: Kevin Keenan
Mobil Oil Engineer:
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010 HVOC	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	6010 chromium Lead	7196 Hexavalent chromium
B-1 (4.0)	S.I	12-19	(8:00)	—	1	3 Teflon tube								H	O	L	D					
B-2 (6.5)			8:05											H	O	L	D					
B-1 (9.0)			8:15											H	O	L	D					
B-1 (11.5)			8:25									X			4121281						X	X
B-1 (14.0)			8:45											H	O	L	D					
B-1 (16.5)			8:50 am									X			4121282						X	X
B-2 (5.0)			9:00											H	O	L	D					
B-2 (11.5)			9:05									X			4121283						X	X
B-2 (15.5)			9:10									X			4121284						X	X

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 12-19-94 3:25
Relinquished by: Date/Time: 12-19-94 4:55
Relinquished by: Date/Time:

Relinquished by: Date/Time: 12-19-94 3:25
Relinquished by: Date/Time:
Relinquished in Lab by: Received by: Date/Time: 12/19/94 4:55

Turnaround Time: (check one)
Normal ☒ Same day ☒
1 day ☐ 2 day ☐
5 day ☐

Sample Integrity
Intact ☒ On Ice ☒

Remarks: Hexavalent Chromium. - Will phone in P.O. #

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-1 (11.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1279

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 20, 1994
Reported: Dec 29, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

RECEIVED
JAN 10 1995

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled:	Dec 19, 1994
30-A Lindbergh Ave.	Sample Descript:	Soil, MW-1 (16.5)	Received:	Dec 19, 1994
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed:	Dec 20, 1994
Attention: Kevin Keenan	Lab Number:	412-1280	Reported:	Dec 29, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-1 (11.5)
Lab Number: 412-1279

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Extracted: Dec 20-27, 1994
Analyzed: Dec 20-27, 1994
Reported: Dec 29, 1994

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	28
Lead	1.0	4.5
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-1 (16.5)

Lab Number: 412-1280

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Extracted: Dec 20-27, 1994
Analyzed: Dec 20-27, 1994
Reported: Dec 29, 1994

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	24
Lead	1.0	4.3
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 4121279-80

Reported: Dec 29, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Chromium	Lead	Hexavalent Chromium	Hexavalent Chromium
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 6010	EPA 6010	EPA 7196	EPA 7196
Analyst:	K. Nill	K. Nill	K. Nill	J. Dinsay	J. Dinsay	M. Nguyen	M. Nguyen
MS/MSD Batch#:	4121345	4121345	4121345	4121280	4121280	4121286	4121290
Date Prepared:	12/20/94	12/20/94	12/20/94	12/27/94	12/27/94	12/20/94	12/20/94
Date Analyzed:	12/20/94	12/20/94	12/20/94	12/27/94	12/27/94	12/20/94	12/20/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	Liberty-100	Liberty-100	Spec-340	Spec-340
Conc. Spiked:	10 µg/kg	10 µg/kg	10 µg/kg	50 µg/kg	50 µg/kg	5.0 mg/kg	5.0 mg/kg
Matrix Spike % Recovery:	97	96	85	98	89	95	108
Matrix Spike Duplicate % Recovery:	92	93	81	100	87	106	110
Relative % Difference:	5.3	3.2	4.8	2.0	2.3	11	1.8
LCS Batch#:	LCS122094	LCS122094	LCS122094	BLK122794	BLK122794	BLK122094	BLK122094
Date Prepared:	12/20/94	12/20/94	12/20/94	12/27/94	12/27/94	12/20/94	12/20/94
Date Analyzed:	12/20/94	12/20/94	12/20/94	12/27/94	12/27/94	12/20/94	12/20/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	Liberty-100	Liberty-100	Spec-340	Spec-340
LCS % Recovery:	130	109	96	102	98	101	101
% Recovery Control Limits:	28-167	35-146	38-150	75-125	75-125	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☒ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

~~Mobil Oil~~ Consulting Firm: ALTON GEOSCIENCE
Station No./Site Address: FORMER Chromex

Address: 30A Lindbergh Ave
Project Contact: Kevin Keenan

City: Livermore State: CA Zip: 94550
~~Mobil Oil Engineer~~: P.O. # 426377

Tel: 510 606 9150 Fax.: 510 606 9260
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010 HVOC	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	6010 chromium + lead	7196 Hexavalent chromium
MW-1 (6.5)	Soil	12-19	2:10	—	1	Steel tube								HOLD								
MW-1 (11.5)			2:15	—								X				4121279					X	X
MW-1 (16.5)			2:20	—								X				4121280					X	X
MW-1 (17.0)			2:25	—									HOLD									
MW-1 (19.0)			2:29	—										HOLD								
MW-1 (20.5)			2:36	—										HOLD								
MW-1 (21.0			2:41	—										HOLD								
MW-1 (22.5)			2:45	—										HOLD								

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 12-19-94 3:25
Relinquished by: Date/Time: 12-19-94 4:55
Relinquished by: Date/Time:
Relinquished in Lab by: Recieved I Y Dalmut Date/Time: 12/19/94 4:55

Relinquished by: Date/Time: 12-19-94 3:25
Relinquished by: Date/Time:

Turnaround Time: (check one):
Normal X Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity:
Intact X On Ice X

Remarks: Hexavalent Chromium - Will phone in P.O.#

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

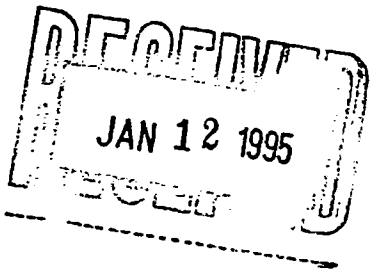
Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-2 (11.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1491

Sampled: Dec 19, 1994
Received: Dec 20, 1994
Analyzed: Dec 29, 1994
Reported: Dec 29, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.



Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled:	Dec 19, 1994
30-A Lindbergh Ave.	Sample Descript:	Soil, MW-2 (16.5)	Received:	Dec 20, 1994
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed:	Dec 29, 1994
Attention: Kevin Keenan	Lab Number:	412-1492	Reported:	Dec 29, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-2 (11.5)

Lab Number: 412-1491

Sampled: Dec 19, 1994
Received: Dec 20, 1994
Extracted: Dec 21-28, 1994
Analyzed: Dec 21-28, 1994
Reported: Dec 29, 1994

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	30
Lead	1.0	5.4
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-2 (16.5)

Lab Number: 412-1492

Sampled: Dec 19, 1994
Received: Dec 20, 1994
Extracted: Dec 21-28, 1994
Analyzed: Dec 21-28, 1994
Reported: Dec 29, 1994

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	31
Lead	1.0	3.4
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-6(10.0)
Analysis Method: EPA 5030/8010
Lab Number: 412-1478

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Analyzed: Dec 28, 1994
Reported: Jan 3, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-6(21.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1479

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Analyzed: Dec 28, 1994
Reported: Jan 3, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121475.ALT <6>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 4121491-92

Reported: Jan 9, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Chromium	Lead	Hexavalent Chromium
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 6010	EPA 6010	EPA 7196
Analyst:	K. Nill	K. Nill	K. Nill	J. Dinsay	J. Dinsay	M. Nguyen
MS/MSD Batch#:	4121281	4121281	4121281	4121696	4121696	4121492
Date Prepared:	12/29/94	12/29/94	12/29/94	12/28/94	12/28/94	12/21/94
Date Analyzed:	12/29/94	12/29/94	12/29/94	12/28/94	12/28/94	12/21/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	Liberty-100	Liberty-100	Spec-340
Conc. Spiked:	10 µg/kg	10 µg/kg	10 µg/kg	50 µg/kg	50 µg/kg	5.0 mg/kg
Matrix Spike % Recovery:	75	112	102	98	96	114
Matrix Spike Duplicate % Recovery:	78	115	103	90	98	128
Relative % Difference:	3.9	2.6	0.98	8.5	2.1	12
LCS Batch#:	LCS122994	LCS122994	LCS122994	BLK122894	BLK122894	BLK122194
Date Prepared:	12/29/94	12/29/94	12/29/94	12/28/94	12/28/94	12/21/94
Date Analyzed:	12/29/94	12/29/94	12/29/94	12/28/94	12/28/94	12/21/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	Liberty-100	Liberty-100	Spec-340
LCS % Recovery:	84	101	94	102	102	119
% Recovery Control Limits:	28-167	35-146	38-150	75-125	75-125	70-130

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☒ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

~~Mobil~~ Consulting Firm: ACTON GEOSCIENCE	Station No./Site Address: FORMER Chromium
Address: 30A Lindbergh Ave	Project Contact: Kevin Keenan
City: LIVERMORE State: CA Zip: 94550	~~Mobil Oil Engineer:~~ PO # 426377
Tel: 510 606 9150 Fax.: 510 606 9260	Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010 Offsite	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	6010 Chromium & Lead	7196 Hexavalent Chromium
MW-2 (16.5)	Soil	12-19	4:00	—	1	Steel tube	—					—	HO	C	D							
MW-2 (11.5)			4:05	—	1							X			4121491						X	X
MW-2 (16.5)			4:10	—	1							X			4121492						X	X
MW-2 (19.0)			4:20	—	1		—					—	HO	L	D		—					
MW-2 (20)			4:25 PM	—	1		—						HO	C	D		—					
MW-2 (24.0)	L		4:35 PM	—	1	L	—						HO	C	D		—					

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 12/20/94 16:57	Relinquished by: Fed Jorgenson 7371 Date/Time: 12/20/94 16:51
Relinquished by: Fed Jorgenson 7371 Date/Time: 12/20/94 1819	Relinquished by: Rec'd Date/Time:
Relinquished by: Date/Time:	~~Relinquished~~ In Lab by: K. G. Kelley 12/20/94 Date/Time: 1819

Turnaround Time: (check one)
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity
Intact X On Ice X

Remarks: Hexavalent Chromium - Will phone in P.O. ~~#~~

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix Descript: Soil
Analysis Method: EPA 418.1 (I.R. with clean-up)
First Sample #: 412-1475

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Extracted: Dec 28, 1994
Analyzed: Dec 28, 1994
Reported: Jan 3, 1995

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Petroleum Oil mg/kg (ppm)	Detection Limit Multiplication Factor
412-1475	MW-3(6.5)	43	1.0

RECEIVED
JAN 18 1995

Detection Limits:	1.0

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121475.ALT <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-3(6.5)
Analysis Method: EPA 8080
Lab Number: 412-1475

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Extracted: Dec 27, 1994
Analyzed: Dec 27, 1994
Reported: Jan 3, 1995

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Aldrin	1.0	N.D.
alpha-BHC	1.0	N.D.
beta-BHC	1.0	N.D.
delta-BHC	1.0	N.D.
gamma-BHC (Lindane)	1.0	N.D.
Chlordane	20	N.D.
4,4'-DDD	6.0	N.D.
4,4'-DDE	2.0	N.D.
4,4'-DDT	6.0	N.D.
Dieldrin	2.0	N.D.
Endosulfan I	2.0	N.D.
Endosulfan II	2.0	N.D.
Endosulfan sulfate	6.0	N.D.
Endrin	2.0	N.D.
Endrin aldehyde	6.0	N.D.
Heptachlor	1.0	N.D.
Heptachlor expoxide	1.0	N.D.
Methoxychlor	20	N.D.
Toxaphene	80	N.D.
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1624

Karen L. Enstrom
Project Manager

4121475.ALT <2>

8

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-3(11.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1476

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Analyzed: Dec 28, 1994
Reported: Jan 3, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-3(16.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1477

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Analyzed: Dec 28-29, 1994
Reported: Jan 3, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	30
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil
Analysis for: Chromium
First Sample #: 412-1476

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Extracted: Dec 28, 1994
Analyzed: Dec 28, 1994
Reported: Jan 3, 1995

LABORATORY ANALYSIS FOR: Chromium

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
412-1476	MW-3(11.5)	0.50	19
412-1477	MW-3(16.5)	0.50	20
412-1478	B-6(10.0)	0.50	37
412-1479	B-6(21.5)	0.50	32

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil
Analysis for: Lead
First Sample #: 412-1476

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Extracted: Dec 28, 1994
Analyzed: Dec 28, 1994
Reported: Jan 3, 1995

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
412-1476	MW-3(11.5)	1.0	4.4
412-1477	MW-3(16.5)	1.0	9.5
412-1478	B-6(10.0)	1.0	10
412-1479	B-6(21.5)	1.0	7.2

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil
Analysis for: Hexavalent Chromium
First Sample #: 412-1476

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Extracted: Dec 21, 1994
Analyzed: Dec 21, 1994
Reported: Jan 3, 1995

LABORATORY ANALYSIS FOR: Hexavalent Chromium

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
412-1476	MW-3(11.5)	0.50	N.D.
412-1477	MW-3(16.5)	0.50	N.D.
412-1478	B-6(10.0)	0.50	N.D.
412-1479	B-6(21.5)	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121475.ALT <9>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 4121475-79

Reported: Jan 3, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Oil & Grease	Chromium	Lead	Hexavalent Chromium
Method:	EPA 418.1	EPA 6010	EPA 6010	EPA 7196
Analyst:	S. Le	J. Dinsay	J. Dinsay	M. Nguyen
MS/MSD Batch#:	4120916	4121696	4121695	4121492
Date Prepared:	12/28/94	12/28/94	12/28/94	12/21/94
Date Analyzed:	12/28/94	12/28/94	12/28/94	12/21/94
Instrument I.D.#:	Miran-IFF	Liberty-100	Liberty-100	Spec-340
Conc. Spiked:	50 mg/kg	50 mg/kg	50 mg/kg	5.0 mg/kg
Matrix Spike % Recovery:	109	98	96	114
Matrix Spike Duplicate % Recovery:	103	90	98	128
Relative % Difference:	5.7	8.5	2.1	12
LCS Batch#:	BLK122894	BLK122894	BLK122894	BLK122194
Date Prepared:	12/28/94	12/28/94	12/28/94	12/21/94
Date Analyzed:	12/28/94	12/28/94	12/28/94	12/21/94
Instrument I.D.#:	Miran-IFF	Liberty-100	Liberty-100	Spec-340
LCS % Recovery:	124	102	102	119
% Recovery Control Limits:	70-130	75-125	75-125	70-130

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 4121476-79

Reported: Jan 3, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 8010	EPA 8010	EPA 8010
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD Batch#:	4121281	4121281	4121281	4121281	4121281	4121281
Date Prepared:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Date Analyzed:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6
Conc. Spiked:	10 µg/kg	10 µg/kg	10 µg/kg	10 µg/kg	10 µg/kg	10 µg/kg
Matrix Spike % Recovery:	76	121	105	75	112	102
Matrix Spike Duplicate % Recovery:	64	108	98	78	115	103
Relative % Difference:	17	11	6.9	3.9	2.6	0.98
LCS Batch#:	LCS122894	LCS122894	LCS122894	LCS122994	LCS122994	LCS122994
Date Prepared:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Date Analyzed:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6
LCS % Recovery:	99	105	96	84	101	94
% Recovery Control Limits:	28-167	35-146	38-150	28-167	35-146	38-150

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 412-1475

Reported: Jan 3, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Lindane	Heptachlor	Aldrin	Dieldrin	Endrin	DDT
Method:	EPA 8080	EPA 8080	EPA 8080	EPA 8080	EPA 8080	EPA 8080
Analyst:	C. Chapman	C. Chapman	C. Chapman	C. Chapman	C. Chapman	C. Chapman
MS/MSD Batch#:	BLK122794	BLK122794	BLK122794	BLK122794	BLK122794	BLK122794
Date Prepared:	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94
Date Analyzed:	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94
Instrument I.D.#:	GCHP-4A	GCHP-4A	GCHP-4A	GCHP-4A	GCHP-4A	GCHP-4A
Conc. Spiked:	2.5 µg/kg	2.5 µg/kg	2.5 µg/kg	5.0 µg/kg	5.0 µg/kg	5.0 µg/kg
Matrix Spike % Recovery:	92	84	76	70	82	80
Matrix Spike Duplicate % Recovery:	116	100	92	88	100	96
Relative % Difference:	27	17	19	23	20	18
LCS Batch#:	BLK122794	BLK122794	BLK122794	BLK122794	BLK122794	BLK122794
Date Prepared:	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94
Date Analyzed:	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94
Instrument I.D.#:	GCHP-4A	GCHP-4A	GCHP-4A	GCHP-4A	GCHP-4A	GCHP-4A
LCS % Recovery:	92	84	76	71	82	80
% Recovery Control Limits:	60-130	60-130	60-130	60-130	60-130	60-130

SEQUOIA ANALYTICAL, #1624

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Consulting Firm: ALTON GEOSCIENCE
Address: 30 A LINDBERGH AVE
City: LIVERMORE State: CA Zip: 94550
Tel: 510 606 9150 Fax.: 510 606 9260

Station No./Site Address: FORMER CHROMEX
Project Contact: Kevin Keenan
Mobil Oil Engineer:
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010 HVOC	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	8080 PCB	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	6010 Chromium Lead	7196 Hexavalent Chromium
MW-3 (6.5)	Soil	12-20	9:15 am	—	1	Steel tube		4121475			X							X				
MW-3 (11.5)			9:25 am	—	1			4121476				X									X	X
MW-3 (16.5)			9:30 am	—	1			4121477				X									X	X
MW-3 (21.5)			9:40 am	—																	X	X
MW-3 (24.5)			9:45 am	—																		
B-6 (5.0)			11:50 am	—	1																	
B-6 (10.0)			12:00	—	1			4121478			X											
B6 (15.0)			12:00	—																	X	X
B-6 (21.5)			12:15	—	1			4121479			X										X	X

CODING (check one)
Code 1 ☐ Emergency Response
Code 2 ☒ Site Assessment
Code 3 ☐ Remediation (Plan Devlpmt.)
Code 4 ☐ Active Remed. (Install./Start-up)
Code 5 ☐ Active Remed. (O & M)
Code 6 ☐ Passive Remed/ Monitoring
Code 7 ☐ Closure
Code 8 ☐ Construction
Code 9 ☐ Litigation/Claims/ Fines

Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Remarks: Hexavalent Chromium ++ Will phone in PO #

Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Received in Lab by: R H Kelley 12/20/94 Date/Time: 5:15 pm

Turnaround Time: (check one)
Normal X Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity
Intact X

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

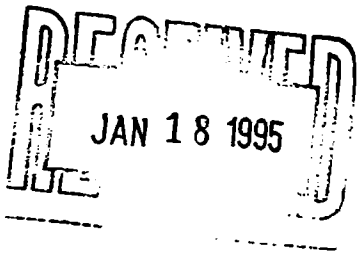
Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Sample Descript: Water, MW1
Analysis Method: EPA 601
Lab Number: 412-1742

Sampled: Dec 27, 1994
Received: Dec 27, 1994
Analyzed: Dec 30, 1994
Reported: Jan 5, 1995

PURGEABLE HALOCARBONS (EPA 601)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	1.5
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	2.5
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	10
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	11
Vinyl chloride	1.0	N.D.



Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121742.ALT <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Sample Descript: Water, MW2
Analysis Method: EPA 601
Lab Number: 412-1743

Sampled: Dec 27, 1994
Received: Dec 27, 1994
Analyzed: Dec 30, 1994
Reported: Jan 5, 1995

PURGEABLE HALOCARBONS (EPA 601)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	2.0
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	5.0
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	8.2
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121742.ALT <2>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Sample Descript: Water, MW3
Analysis Method: EPA 601
Lab Number: 412-1744

Sampled: Dec 27, 1994
Received: Dec 27, 1994
Analyzed: Dec 30, 1994
Reported: Jan 5, 1995

PURGEABLE HALOCARBONS (EPA 601)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	23
trans-1,2-Dichloroethene	0.50	0.69
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	4.0
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	9.6
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121742.ALT <3>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Sample Descript: Water
Analysis for: Lead
First Sample #: 412-1742

Sampled: Dec 27, 1994
Received: Dec 27, 1994
Extracted: Dec 28, 1994
Analyzed: Jan 4, 1995
Reported: Jan 5, 1995

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
412-1742	MW1	0.020	N.D.
412-1743	MW2	0.020	N.D.
412-1744	MW3	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Sample Descript: Water
Analysis for: Chromium
First Sample #: 412-1742

Sampled: Dec 27, 1994
Received: Dec 27, 1994
Extracted: Dec 28, 1994
Analyzed: Jan 4, 1995
Reported: Jan 5, 1995

LABORATORY ANALYSIS FOR: Chromium

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
412-1742	MW1	0.010	0.069
412-1743	MW2	0.010	0.044
412-1744	MW3	0.010	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Sample Descript: Water
Analysis for: Hexavalent Chromium
First Sample #: 412-1742

Sampled: Dec 27, 1994
Received: Dec 27, 1994
Extracted: Dec 28, 1994
Analyzed: Dec 28, 1994
Reported: Jan 5, 1995

LABORATORY ANALYSIS FOR: Hexavalent Chromium

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
412-1742	MW1	0.0050	N.D.
412-1743	MW2	0.0050	0.025
412-1744	MW3	0.0050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Matrix: Liquid

QC Sample Group: 4121742-44

Reported: Jan 5, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Chromium	Lead	Hexavalent Chromium
Method:	EPA 601	EPA 601	EPA 601	EPA 200.7	EPA 200.7	EPA 7196
Analyst:	K. Nill	K. Nill	K. Nill	J. Dinsay	J. Dinsay	M. Nguyen
MS/MSD Batch#:	4121483	4121483	4121483	4121653	4121653	4121744
Date Prepared:	12/30/94	12/30/94	12/30/94	12/28/94	12/28/94	12/28/94
Date Analyzed:	12/30/94	12/30/94	12/30/94	1/4/95	1/4/95	12/28/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	Liberty-100	Liberty-100	Spec-340
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	1.0 mg/L	1.0 mg/L	0.050 mg/L
Matrix Spike % Recovery:	100	108	97	93	95	131
Matrix Spike Duplicate % Recovery:	112	103	96	98	97	124
Relative % Difference:	11	4.7	1.0	5.2	2.1	5.5
LCS Batch#:	LCS123094	LCS123094	LCS123094	BLK122894	BLK122894	7196 MN12H-1
Date Prepared:	12/30/94	12/30/94	12/30/94	12/28/94	12/28/94	12/28/94
Date Analyzed:	12/30/94	12/30/94	12/30/94	1/4/95	1/4/95	12/28/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	Liberty-100	Liberty-100	Spec-340
LCS % Recovery:	96	101	96	101	103	104
% Recovery Control Limits:	28-167	35-146	38-150	75-125	75-125	75-125

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 West Striker Ave. • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☒ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Company Name: Alton Geoscience	Project Name: FORMER CHROMEX PLATING FACILITY
Address: 30A Lindbergh Ave	Billing Address (if different):
City: Livermore State: Ca Zip Code: 94550	
Telephone: 510 606 9150 FAX #: 606 9260	P.O. #: 426 383
Report To: KEVIN KEENAN Sampler: PAUL RASMUSSEN	QC Data: ☒ Level A (Standard) ☐ Level B ☐ Level C ☐ Level D

Turnaround Time:
☒ 10 Working Days ☐ 3 Working Days ☐ 2 - 8 Hours
☐ 7 Working Days ☐ 2 Working Days
☐ 5 Working Days ☐ 24 Hours

☐ Drinking Water
☐ Waste Water
☑ Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	HVOC's / EPA 601	Total Lead / 200.7	Total Chromium / 200.7	Chromium VI / 218.6				Comments
1. MW 1	12-27 / 1130	W	5	Plastic VOA	4121942	X	X	X	X			A-L	
2. MW 2	12-27 / 1100				4121943								
3. MW 3	12-27 / 1200				4121944								
4.													
5.													
6.													* Note: Chromium VI Analysis to be completed immediately.
7.													
8.													
9.													
10.													

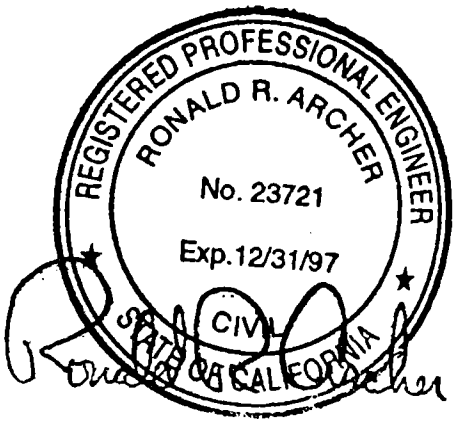
Relinquished By:	Date: 12 27	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time
Relinquished By:	Date:	Time:	Received By Lab:	Date: 12/27/94	Time: 1400

Pink - Client
Yellow - Sequoia
White - Sequoia

APPENDIX C

SURVEY DATA

RON ARCHER
CIVIL ENGINEER, INC.
CONSULTING • PLANNING • DESIGN • SURVEYING
4133 Mohr Ave., Suite E • Pleasanton, CA 94566
(510) 462-9372



DECEMBER 13, 1994

JOB NO. 2223

ELEVATIONS OF EXISTING MONITORING WELLS AT THE FORMER CHROMEX FACILITY LOCATED AT 1400 PARK AVENUE BETWEEN HORTON STREET AND HOLDEN STREET, CITY OF EMERYVILLE, ALAMEDA COUNTY, CALIFORNIA.

FOR: *ALTON GEOSCIENCE INC.*

BENCHMARK: # H-130 - U.S.G.S.

A FOUND U.S.G.S BRASS DISK SET IN THE NORTHEAST CORNER OF THE TOWN HALL BUILDING LOCATED AT 1333 PARK AVENUE AT HOLLIS STREET. ELEVATION TAKEN AS 24.514 U.S.G.S. DATUM.

MONITORING WELL DATA TABLE

WELL DESIGNATION	TOP OF CASING ELEVATION	TOP OF BOX ELEVATION
MW-1	16.71	16.96
MW-2	13.99	14.22
MW-3	17.69	18.03

aqua science engineers inc.

January 12, 1996

PROJECT REPORT
UNDERGROUND STORAGE TANK REMOVAL
(ASE JOB NO. 2908)

for

Emeryville Properties
1400 Park Avenue
Emeryville, California

Submitted by:

Aqua Science Engineers
2411 Old Crow Canyon Road, #4
San Ramon, California 94583
(510) 820-9391

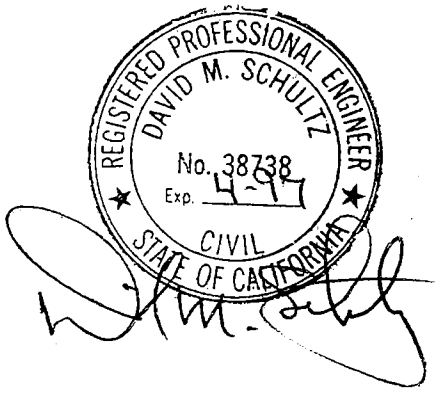


TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	PERMITS	1
3.0	MOBILIZATION	2
4.0	PRE-EXCAVATION ACTIVITIES	2
5.0	LIQUID REMOVAL	2
6.0	TANK PREPARATION	3
7.0	TANK REMOVAL OPERATIONS	3
8.0	SOIL SAMPLE COLLECTION AND CHEMICAL ANALYSIS	4
9.0	INITIAL EXCAVATION BACKFILLING	6
10.0	GROUNDWATER MONITORING WELL SAMPLING	6
11.0	ACHCSA TELEPHONE CONVERSATION	7
12.0	FINAL BACKFILLING AND RESURFACING	7
13.0	OFFHAUL AND DISPOSAL OF STOCKPILED SOIL	8
14.0	CONCLUSIONS AND RECOMMENDATIONS	8
15.0	REPORT LIMITATIONS	9

FIGURES

FIGURE 1 - SITE LOCATION MAP

FIGURE 2 - SITE PLAN

FIGURE 3 - SAMPLING PLAN

APPENDICES

APPENDIX A - PERMITS

APPENDIX B - HAZARDOUS & NON-HAZARDOUS WASTE MANIFESTS, BILLS OF LADING, AND DISPOSAL WEIGHT TAGS

APPENDIX C - TANK DISPOSAL CERTIFICATES

APPENDIX D - LABORATORY ANALYSES and CHAIN OF CUSTODY

1.0 INTRODUCTION

This report documents the removal, disposal and related activities of the underground storage tank (UST) closure performed at the Emeryville Properties facility located at 1400 Park Avenue in Emeryville, California (Figure 1). The following USTs were removed from the site (Figure 2):

QUANTITY	TYPE AND SIZE UST	FORMER CONTENTS
1	Steel, 550 gallon	Diesel/Motor Oil
1	Steel, 550 gallon	Gasoline
1	Steel, 550 gallon	Gasoline

The scope of services provided by Aqua Science Engineers, Inc. (ASE), were conducted on behalf of the property owner, Emeryville Properties, in accordance with ASE proposal No. 95-187 and included the following tasks:

- o Preparing a health and safety plan.
- o Obtaining permits from appropriate agencies.
- o Removing and disposing of liquids from the USTs.
- o Removing and disposing of the USTs and piping.
- o Sampling and analyzing the soil beneath the USTs.
- o Sampling and analyzing the stockpiled soil.
- o Sampling and analyzing a nearby monitoring well.
- o Offhauling the stockpiled soil to a local landfill.
- o Backfilling and resurfacing the excavation.
- o Preparing this report of methods and findings.

Emeryville Properties' environmental consultant, Ms. Gwen Tellegen, acted as the property owner's representative in a majority of aspects of this project.

2.0 PERMITS

Permits and approvals required to remove the USTs were obtained by ASE from the City of Emeryville Fire Department (EFD), the Alameda County Health Care Services Agency (ACHCSA), CAL-OSHA, and the Bay Area Air Quality Management District (BAAQMD). Copies of these permits, application forms, and notification documents are contained in Appendix A.

3.0 MOBILIZATION

ASE mobilized for on-site activities on October 23, 1995. Field operations were conducted by trained technicians who are certified per the mandatory 40-hour safety program as specified in the OSHA Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120). A tailgate safety meeting was conducted and the health and safety plan was signed by all field personnel. Personnel present during the activities included ASE Project Manager David Allen, ASE field technician Ralph Eymann, representatives from Remediation Contractors (equipment and labor), Mr. William Lewerenz and Ms. Gwen Tellegen representing Emeryville Properties, and Mr. Brian Oliva of the Alameda County Helath Care Services Agency.

4.0 PRE-EXCAVATION ACTIVITIES

ASE staff began on-site activities on October 23, 1995 by breaking and removing the concrete on top of the USTs. Previously, another contractor had removed a portion of the concrete that was directly over the USTs exposing two (2) fill pipes. At this time, it was thought that only two USTs existed. After the concrete was removed, ASE began uncovering the tops of the two USTs to gain access for product evacuation and rinsing. During the uncovering activities, ASE identified a third UST. Portions of the soil surrounding the fill ends of the USTs was minorly stained and odorous. Since it appeared the soils surrounding the three USTs potentially contained petroleum hydrocarbons, they were stockpiled on site next to the excavation and covered with visqueen for handling at a later date or off-site disposal. Based on the layout of the USTs and underground piping and the former presence of a raised concrete island directly above the USTs, it was assumed that the dispensers (previously removed) were located on top of the USTs. No piping leading to any other areas was discovered in the excavation.

5.0 LIQUID REMOVAL

Upon completion of the uncovering activities, ASE evacuated remaining residual product within the USTs. 350 gallons of residual product was pumped from the USTs and transported to the Seaport Petroleum Corporation facility in Redwood City, CA under Bill of Lading No. 1616 by First Environmental Group, a licensed hazardous waste hauler on October 23, 1995. A copy of the Bill of Lading is attached in Appendix B.

Following product removal, each UST was triple rinsed. First Environmental Group returned to the site several hours later to evacuate the rinsate liquids generated by ASE during the triple rinsing of the three USTs. 200 gallons of rinsate was pumped from the USTs and transported to the Seaport Petroleum Corporation facility in Redwood City, CA under Non-Hazardous Special Waste Manifest No. 000748 by First Environmental Group, a licensed hazardous waste hauler on October 23, 1995. A copy of the manifest is attached in Appendix B.

6.0 TANK PREPARATION

The three USTs were made inert through the addition of 100 pounds of dry ice to each tank. The UST removal operations were witnessed by Mr. Brian Oliva of the ACHCSA. The EFD representative was unable to attend, but relinquished his authority to Mr. Oliva over the telephone on October 23, 1995. The Lower Explosive Limit (LEL) of the USTs atmosphere was measured and found to be within the allowable range; therefore, approval for the USTs removal was granted by Mr. Oliva.

7.0 TANK REMOVAL OPERATIONS

On October 23, 1995, the USTs were lifted from the excavation, placed on plastic sheeting, hand cleaned, and inspected by ASE and the ACHCSA. The USTs were then loaded onto the transport vehicles. Upon inspection of the USTs, no holes or cracks were noted on either of the gasoline USTs; several holes were identified in the diesel/motor oil UST. The diesel/motor oil UST was wrapped in plastic to contain any leaking liquid.

The USTs were transported to the Erickson, Inc. facility in Richmond, CA (a licensed recycling facility, No. CAD009466392) by Erickson, Inc. (State Transporter's ID No. 602668) under Manifest No. 95592444 on October 23, 1995 where they were properly disposed. See Appendix B for a copy of the manifest. Also see Appendix C for a copy of the Tank Disposal Certificates.

8.0 SOIL SAMPLE COLLECTION AND CHEMICAL ANALYSES

On October 23, 1995 with the involvement of Mr. Brian Oliva of the ACHCSA, ASE collected the following soil samples (see Figure 3).

TABLE ONE
SAMPLE LOCATIONS - EXCAVATION PIT, and STOCKPILE

Sample Name	Location	Depth
North, 9'	Northern End Bottom of Excavation Below Gas UST	9' bgs
Middle, 9'	Middle Bottom of Excavation Below Gas UST	9' bgs
South, 9'	Southern Bottom of Excavation Below Diesel/MO UST	9' bgs
North, 12'	Northern End Bottom of Excavation after overexcavation	12' bg
South, 12'	Southern End Bottom of Excavation after overexcavation	12' bg
STKP	Stockpiled Soil	
STKP 11/13	Same Stockpiled Soil described above, sampled 3-weeks later	

The soil samples collected at 9' below ground surface (bgs) were to assess the soil contamination, if any, 12-24 inches below the bottom of the former USTs. Based on the visual inspection and odor of the excavated soils, it was apparent that some degree of soil contamination existed in the soil adjacent to and below the USTs. Therefore, after the 9' bgs soil samples were collected, ASE overexcavated the bottom of the excavation to a total depth of 12' bgs in an attempt to assess the vertical extent of the apparent soil contamination. At approximately 11' bgs, groundwater began seeping into the excavation. When visible, the soil below the groundwater appeared to be free of staining. Two soil samples (North, 12' and South 12') were collected from the new bottom of the excavation. This material appeared to be free of staining and petroleum hydrocarbon odors.

3-point composite soil samples were collected from the stockpiled/overexcavated soil.

The soil samples were collected in 4 ounce glass jars, labeled, placed on ice and transported to McCampbell Analytical Inc. (MAI) of Pacheco, CA (DOHS No. 1644) under chain of custody. The above-referenced samples were analyzed for all or a combination of the following: Total Petroleum Hydrocarbons (TPH) as gasoline by Modified EPA Method 5030/8015, TPH as diesel and motor oil by Modified EPA Method 3550/8015, benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8020, total lead by EPA Method 6010, and STLC Lead by EPA Method 6010/200.7, 239.2 The stockpile was re-sampled by ASE on November 13, 1995 (sample id. STKP 11/13) for purposes of profiling the contaminated soil

into a local landfill. This sample was analyzed for volatile organic compounds (VOCs) by EPA Method 8240, semi-volatile organic compounds (SVOCs) by EPA Method 8270, CAM 17 metals, reactivity - corrosivity - ignitability (RCI), and STLC lead.

Analytical results are shown below in Table Two and Table Three; copies of laboratory data can be found in Appendix D. A second round of analytical testing of the stockpiled soil (sample name STKP 11/13) were carried out to obtain approval into a landfill. The results of the STKP 11/13 sample indicated the following: 0.34 ppm ethylbenzene, 5.2 ppm total xylenes, negative reactivity, a 6.60 pH, negative ignitability, 2 ppm napthalene, 3.2 ppm 2-methylnapthalene, and 6.6 ppm bis (2-ethylhexyl) phthalate. No TTLC metals in excess of 10X the STLC (except lead at 60 ppm TTLC and 1.1 ppm STLC) were detected. All other compounds resulted in less that detection limit concentrations. All of the afore-mentioned results for the STKP 11/13 sample rendered the soil permittable for placement in the BFI Livermore subtitle D cell for petroeum-hydrocarbon contaminated, non-hazardous soil.

TABLE TWO
SOIL SAMPLE RESULTS
All Results in **Parts Per Million**

Sample Name	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	TPH Diesel	TPH Motor Oil
North, 9'	140	<0.05	0.55	0.81	7.4	4800	14000
Middle, 9'	1300	0.41	6.1	13	110	2600	8000
South, 9'	1100	0.22	5.6	5.0	33	2100	5800
North, 12'	<1.0	<0.005	<0.005	<0.005	<0.005	<1.0	<5.0
South, 12'	<1.0	<0.005	<0.005	<0.005	0.027	<1.0	<5.0
STKP*	850	<0.04	1.9	3.8	40	2900	6700
EPA METHOD	8015M	8020	8020	8020	8020	8015M	8015M

* Composited sample (performed at the lab), collected from the Stockpiled Soil

TABLE THREE
SOIL SAMPLE RESULTS
All Results in **Parts Per Million**

Sample Name	TTLC Lead	STLC Lead
North, 9'	66	2.0
North, 12'	6.3	---
EPA METHOD	6010	6010

9.0 INITIAL EXCAVATION BACKFILLING

On October 23, 1995, ASE lined the bottom and sides of the excavation and then pushed approximately 27 tons of clean backfill material into the excavation. This material was not compacted. It was placed into the excavation in such a manner that a ramp was made from the surface into the excavation. This was performed for safety reasons only because the excavation was to remain open until laboratory results were obtained.

10.0 GROUNDWATER MONITORING WELL SAMPLING

Since groundwater was identified in the UST excavation, Ms. Gwen Tellegen asked ASE to collect a groundwater sample from monitoring well MW-1 which is approximately 30 feet downgradient from the excavation. This sample represents the groundwater downgradient of the former USTs. On November 6, 1995, ASE mobilized to the site to purge and collect a groundwater sample from monitoring well MW-1. The sample was analyzed by MAI Laboratories for VOCs by EPA Method 8240, and total extractable hydrocarbons as diesel and motor oil by Modified EPA Method 3510/8015M. Analytical results are shown below in Table Four; copies of laboratory data can be found in Appendix D. The only constituents detected in the groundwater sample appear to be those found in a known area-wide solvent contamination problem. It does not appear that the groundwater contamination is a result of the former contents of the USTs.

TABLE FOUR
WATER SAMPLE RESULTS
All Results in **Parts Per Billion**

Sample Ident.	cis-1,2 DCE	PCE	TCE	Toluene	Total Xylenes	TPH Diesel	TPH Motor Oil
MW-1	2.6	7.9	5.8	4.0	7.8	<50	<250
MCL	6	5	5	100*	1750	---	---
EPA METHOD	8240	8240	8240	8240	8240	8015M	8015M

NOTE: All other 8240 compounds resulted in less than detectable concentrations.
* An MCL has not been established, however 100 ppb is a recommended action level (RAL).

11.0 ACHCSA TELEPHONE CONVERSATION

Upon receipt of all the afore-mentioned analytical results, ASE contacted Mr. Brian Oliva of the ACHCSA by telephone for his verbal approval for backfilling and compaction of the UST excavation. ASE explained to Mr. Oliva that reasonable efforts were conducted to remove sources of contaminated soil from the excavation and that such contaminated soil was to be offhauled to a local landfill. ASE also explained the results of the monitoring well sampling. Mr. Oliva concurred with the recommendation by ASE to conduct no further overexcavation or soil-remedial activities regarding the USTs and agreed to allow ASE to backfill, compact and resurface the excavation.

12.0 FINAL BACKFILLING AND RESURFACING

On November 28, 1995, ASE returned to the site to conduct final backfilling and compaction activities. A portion of the material pushed into the excavation on October 23, 1995 was removed in order to compact the material properly. ASE imported 50 additional tons of clean fill and completely backfilled and compacted the UST excavation. Several days later, the surface was refinished with concrete to match the existing surroundings.

13.0 OFFHAUL AND DISPOSAL OF STOCKPILED SOIL

After profiling the material and receiving written authorization, 65.29 tons of contaminated soil was transported to the BFI Livermore Subtitle D Cell under Non Hazardous Special Waste Manifests (See Appendix B for copies of the manifests) on November 28, 1995.

14.0 CONCLUSIONS AND RECOMMENDATIONS

* On October 23, 1995, three (3) USTs were removed from the Emeryville Properties facility at 1400 Park Avenue in Emeryville, CA and disposed of properly off site.

* Contaminated soil beneath the USTs was overexcavated and temporarily stockpiled on site awaiting disposal profiling results. On October 23, 1995, 65.29 tons of contaminated soil was hauled from the property and disposed of at the BFI Livermore facility as non-hazardous petroleum-hydrocarbon contaminated soil.

* The entire excavation was lined with visqueen then backfilled with imported fill material, compacted and resurfaced.

* It appears at this time that any residual soil contamination that may exist does not pose a significant threat to the shallow groundwater based on the results of the sample collected from the nearby, downgradient monitoring well.

ASE recommends no further soil excavation or remedial activities related to the former underground storage tanks. We recommend that the monitoring well downgradient of the former USTs (MW-1) be analyzed on a quarterly basis for TPH-G, TPH-D, TPH-MO, BTEX and VOCs. If after four consecutive quarters results indicate no or insignificant concentrations of petroleum hydrocarbons and VOCs, ASE recommends applying for case closure in respect to the USTs.

15.0 REPORT LIMITATIONS

The results of this investigation represent conditions at the time and specific location at which samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting from sources other than the former USTs and associated piping at the site, or for parameters not analyzed for by the laboratory. All of the laboratory work cited in this report was prepared under the direction of independent CSDHS certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

ASE appreciates the opportunity to assist with the environmental needs of this property. Should questions or comments arise, please feel free to give us a call at (510) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.



David Allen, R.E.A.
Project Manager

Enclosures: Figure 1 - Site Location Map
Figure 2 - Site Plan
Figure 3 - Sampling Plan
Appendices A - D

copies to: Mr. Brian Oliva, Alameda County Health Care Services
Mr. George Warren, City of Emeryville Fire Department
Mr. William Lewerenz, Emeryville Properties
Ms. Gwen Tellegen, Emeryville Properties representative

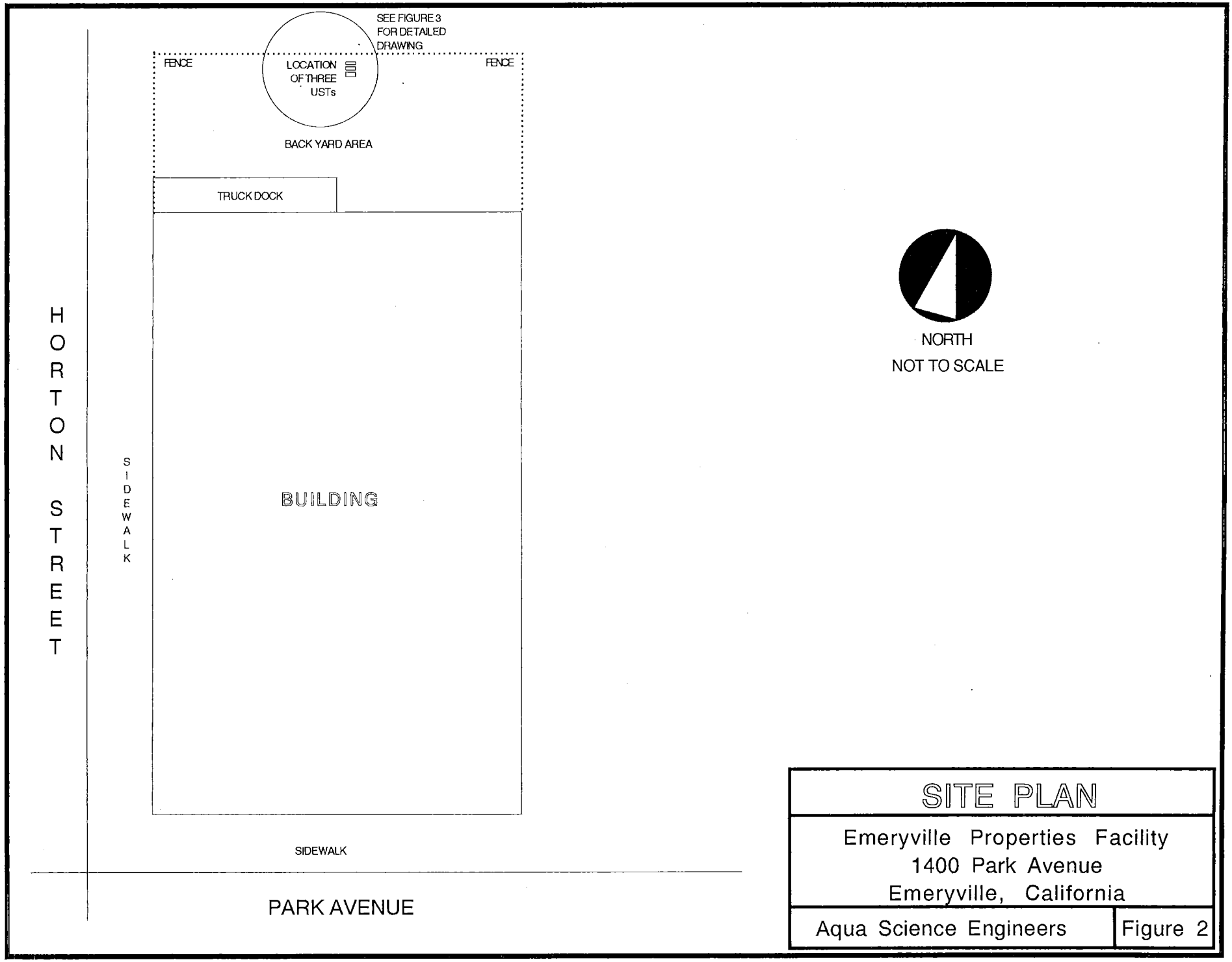
FIGURES



LOCATION MAP

Emeryville Properties Facility
1400 Park Avenue
Emeryville, California

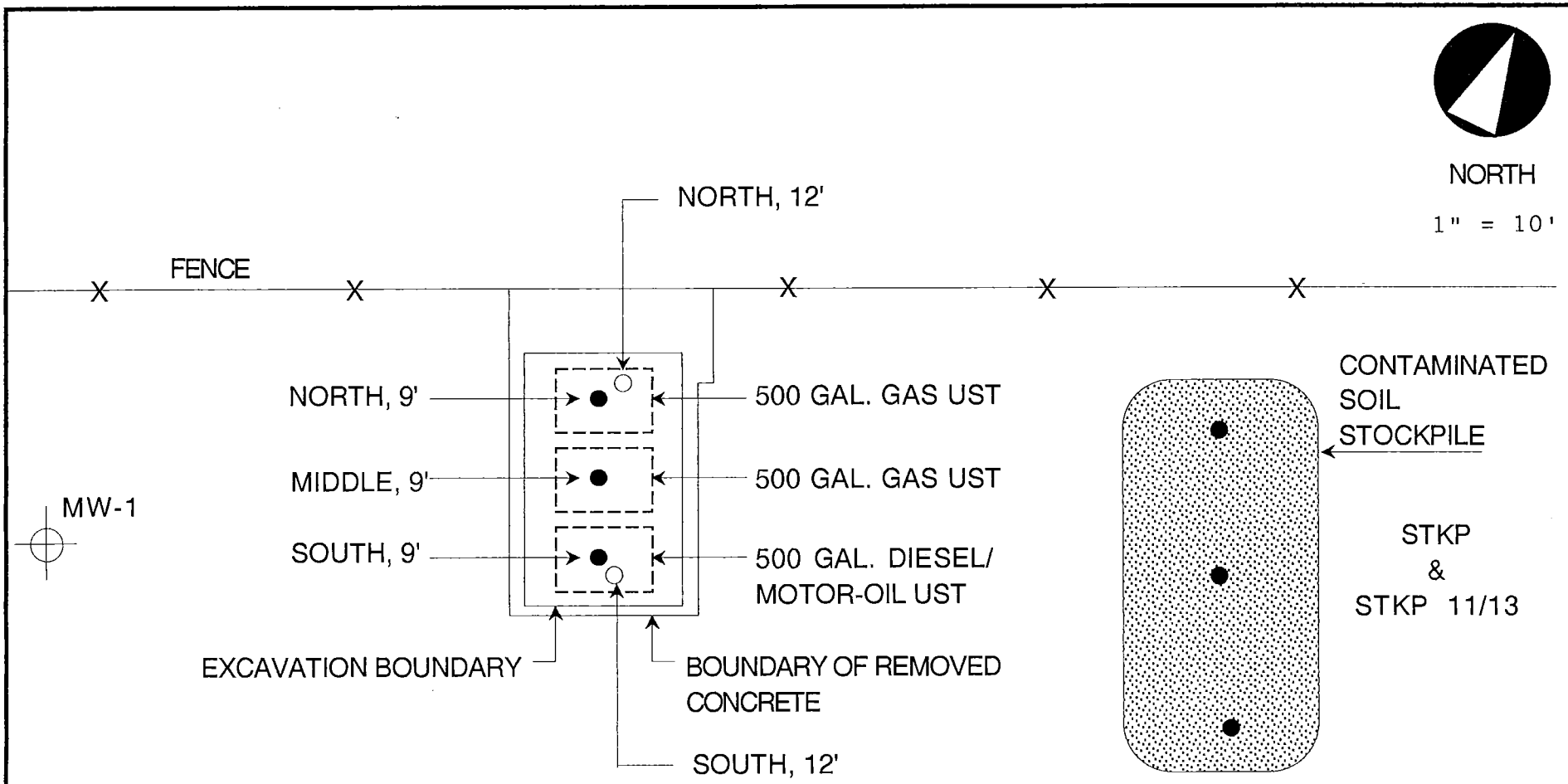
Aqua Science Engineers	Figure 1



SITE PLAN

Emeryville Properties Facility
1400 Park Avenue
Emeryville, California

Aqua Science Engineers | Figure 2



LEGEND

- ● SOIL SAMPLE COLLECTED FROM 12"-24" BELOW BOTTOM OF UST
- ○ SOIL SAMPLE COLLECTED AT 12-FEET BELOW GROUND SURFACE, AFTER OVEREXCAVATION ACTIVITIES
- ⊕ MONITORING WELL, INSTALLED BY ALTON GEOSCIENCE

SAMPLING PLAN

Emeryville Properties Facility
1400 Park Avenue
Emeryville, California

AQUA SCIENCE ENGINEERS, INC. | Figure 3

APPENDIX A

PERMITS

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL PROTECTION DIVISION
1131 HARBOR BAY PARKWAY, RM 250
ALAMEDA, CA 94502-6577
PHONE # 510/567-6700
FAX # 510/337-9335

Project Specialist

ACCEPTED
Underground Storage Tank Closure Permit Application
Alameda County Division of Hazardous Materials
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

These closure/removal plans have been received and found to be acceptable and essentially meet the requirements of State and Local Health Laws. Changes to your closure plans indicated by this Department are to assure compliance with State and local laws. The project proposed herein is now released for issuance of any required building permits for construction/destruction.
One copy of the accepted plans must be on the job and available to all contractors and craftsman involved with the removal.
Any changes or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspections Department to determine if such changes meet the requirements of State and local laws.
Notify this Department at least 72 hours prior to the following required inspections:

✓ Removal of Tank(s) and Piping
✓ Sampling
___ Final Inspection

Issuance of a) permit to operate, b) permanent site closure, is dependent on compliance with accepted plans and all applicable laws and regulations.

*THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS:

Contact Specialist:

Special Instructions
① Health & Safety Plan must adhere to Title 8 (OSHA)
② ③ ④ OBTAIN BOE #'s for UST site.

Brian Oliver

UNDERGROUND TANK CLOSURE PLAN

* * * Complete according to attached instructions * * *

1. Name of Business NONE (Property previously leased to Chromex Co.)
   Business Owner or Contact Person (PRINT) Mr. William Lewerenz
2. Site Address 1400 PARK AVENUE
   City EMERYVILLE Zip 94608 Phone NONE
3. Mailing Address c/o EMERYVILLE PROPERTIES 699 2nd Street
   City S.F. Zip 94107 Phone _____
4. Property Owner EMERYVILLE PROPERTIES c/o WILLIAM LEWERENZ
   Business Name (if applicable) ↑
   Address 699 2nd STREET
   City, State SAN FRANCISCO Zip 94107
5. Generator name under which tank will be manifested
   EMERYVILLE PROPERTIES c/o WILLIAM LEWERENZ
   EPA ID# under which tank will be manifested C A C 0 0 1 1 3 3 1 4 4

CITY OF EMERYVILLE
FIRE DEPARTMENT
6303 HOLLIS STREET
EMERYVILLE,CA.,94608
(510) 596-3750

FIRE DEPARTMENT USE ONLY

FPB-1095-16
(PERMIT NUMBER)

APPLICATION AND PERMIT

Application Received :
Date: 10/18/95 Signed: GW

Permit Issued :
Date: 10/18/95 Signed: GW

THIS APPLICATION IS YOUR PERMIT WHEN PROPERLY FILLED OUT, SIGNED, VALIDATED AND FEES PAID.

ADDRESS: 1400 PARK AVENUE

BUSINESS NAME : EMERYVILLE PROPERTIES

CONTACT PERSON : DAVID ALLEN, ASE Inc.

TELEPHONE NUMBER : 510-820-9391

EFD Permit Type(s) :
(see reverse)

Expiration Date :
(6 mos. from date of issue

TOTAL FEES DUE: $125.00/tank

MAKE CHECK PAYABLE TO THE CITY OF EMERYVILLE.

FEES ARE ESTABLISHED THRU THE CITY OF EMERYVILLE MASTER FEE SCHEDULE ADOPTED JUNE 1, 1993. COPY AVAILABLE ON REQUEST.

DESCRIPTION OF OPERATION: REMOVAL OF 2 500-GALLON USTs.

APPLICANT READ AND SIGN BELOW:

I CERTIFY THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION GIVEN IS TRUE AND CORRECT. I AGREE TO COMPLY WITH ALL LOCAL ORDINANCES AND STATE LAWS THAT RELATE TO THIS PERMIT. I HEREBY AUTHORIZE REPRESENTATIVES OF THE CITY TO ENTER UPON THE ABOVE MENTIONED PROPERTY TO VERIFY COMPLIANCE WITH THE CONDITIONS OF THIS PERMIT, AT ANY REASONABLE TIME.

☒ Building Owner : David Allen, ASE Inc. Agent for Emeryville Properties
☐ Business Operator :
Date of Application : 10-16-95

Occupancy Group/Division: (per UBC Table 5A) N/A

OCCUPANCY TYPE:

Commercial	☐	Assembly	☐
Industrial	☒	Educational	☐
Residential	☐	H-class	☐

Other ☐ Specify : _____

THIS PERMIT MUST BE AVAILABLE FOR INSPECTION AT ALL TIMES

REVOCATION OF PERMIT

THE CHIEF IS AUTHORIZED TO SUSPEND/REVOKE A PERMIT WHEN THE CHIEF HAS DETERMINED THAT SECTION 4.107, 1991 UFC HAS BEEN VIOLATED.

POSTING OF PERMIT

PERMIT(S) SHALL BE KEPT ON THE PREMISES DESIGNATED AT ALL TIMES AND SHALL BE AVAILABLE FOR INSPECTION AT ANY TIME BY ANY PERSON(S) WHO ARE AUTHORIZED BY THE CHIEF OF THE EMERYVILLE FIRE DEPARTMENT.

DATE	INSPECTION NOTES/COMMENTS	INSPECTOR
10/16	application & removal requirements picked up 10/16/95 by Andrea Science rep.	GW
10/18	Check # 17418 ; applicant en route for Bus. Lic. ; removal set for 10/23/95, 1300 hrs.	GW

White: Applicant Yellow: EFD Pink: Finance

APPENDIX B

HAZARDOUS & NON-HAZARDOUS WASTE MANIFESTS,
BILLS OF LADING, AND DISPOSAL WEIGHT TAGS

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-96)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAC001133144 — Manifest Document No. 95592444 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
EMERYVILLE PROPERTY'S
699 2nd STREET SAN FRANCISCO CA 94107
4. Generator's Phone (415) 957-1588

A. State Manifest Document Number: 95592444
B. State Generator's ID:
C. State Transporter's ID: 4002668
D. Transporter's Phone:
E. State Transporter's ID:
F. Transporter's Phone:
G. State Facility's ID:
H. Facility's Phone:

5. Transporter 1 Company Name: ERICKSON INC.
6. US EPA ID Number: CAD009466392
7. Transporter 2 Company Name:
8. US EPA ID Number:
9. Designated Facility Name and Site Address: Erickson, Inc. 255 Parr Blvd. Richmond, CA. 94801
10. US EPA ID Number: CAD 009466392 (16728)

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON-RCRA Hazardous Waste Solid Waste Empty Storage Tank.	03	T	1500	P	State: EPA/Other:
b.					State: EPA/Other:
c.					State: EPA/Other:
d.					State: EPA/Other:

J. Additional Descriptions for Materials Listed Above
K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information
Keep away from sources of ignition. Always wear hardhats when working around U.G.S.T.'s 24 Hr. Contact Name David Allen & Phone 510 820-9391

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
Owen Tellefsen for Emeryville Impatter		10	23	95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
CHARLEY ELMORE	Charley Elmore	10	23	95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

95592444

DTSC 8022A (1/95)
EPA 8700—22

Yellow: GENERATOR RETAINS.

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV.
If waste is NOT asbestos waste, complete only Sections I, II and III.

No. 606867

Section I: GENERATOR (Generator completes all of Section I)

a. Generator Name: EMERYVILLE PROPERTIES c/o WILLIAM LEWEERENZ
b. Generating Location: FORMER CHARLES LOWE COMPAN
c. Address: 699 SECOND STREET
SAN FRANCISCO, CA 94107
d. Address: 1400 PARK AVENUE
EMERYVILLE, CA 94608
e. Phone No.: 415-957-1888
f. Phone No.: NONE (4-15-94)

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: EMERYVILLE PROPERTIES c/o WILLIAM LEWEERENZ
h. Owner's Phone No.: 415-957-1888

i. BFI WASTE CODE: CA 405 112295 40243

Containers | Quantity | Units | No. | TYPE

	20	T		T

TYPE
DM - METAL DRUM
DP - PLASTIC DRUM
B - BAG
BA - 6 MIL. PLASTIC BAG or WRAP
T - TRUCK
O - OTHER

UNITS
P - POUNDS
Y - YARDS
M³ - CUBIC METERS
Y³ - CUBIC YARDS
O - OTHER

j. Description of Waste: TPH CONTAMINATED SOIL

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

DAVID ALLEN, ASE INC. Agent for Emeryville Prop. — Signature — 11 28 95

Generator Authorized Agent Name | Signature | Shipment Date

Section II: TRANSPORTER (Generator complete a-d; Transporter I complete e-g; Transporter II complete h-n)

TRANSPORTER I

a. Name: EARL STEVENS
b. Address: 1155 HARGUS
c. Driver Name/Title: GOTTAGO-E. STEVENS (PRINT/TYPE)
d. Phone No.: 644-4593
e. Truck No.: R99
f. Vehicle License No./State: 9C14022
Acknowledgement of Receipt of Materials.
g. Driver Signature — Shipment Date

TRANSPORTER II

h. Name:
i. Address:
j. Driver Name/Title: (PRINT/TYPE)
k. Phone No.:
l. Truck No.:
m. Vehicle License No./State:
Acknowledgement of Receipt of Materials.
n. Driver Signature — Shipment Date

Section III: DESTINATION (Generator completes a-d, destination site completes e-f.)

a. Site Name: BFI VASCO RD.
b. Physical Address: VASCO RD.
LIVERMORE, CA
c. Phone No.: 510-447-0491
d. Mailing Address: 4001 VASCO RD
LIVERMORE, CA 94550

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. Name of Authorized Agent — Signature — 11 28 95 Receipt Date

Section IV: ASBESTOS (Generator complete a-d, f, g, Operator* completes e.)

a. Operator's* Name:
b. Operator's* Phone No.:
c. Operator's* Address:
d. Special Handling Instructions and additional information:

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

e. Operator's* Name & Title:

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV.
If waste is NOT asbestos waste, complete only Sections I, II and III.

No. 606880

Section I GENERATOR (Generator completes all of Section I)

a. Generator Name: EMERYVILLE PROPERTIES c/o WILLIAM LEWERENZ
b. Generating Location: FORMER CHARLES LOWE COMPANY
c. Address: 699 SECOND STREET
SAN FRANCISCO CA 94107
d. Address: 1400 PARK AVENUE
EMERYVILLE CA 94608
e. Phone No.: 415. 957. 1888
f. Phone No.: NONE

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: EMERYVILLE PROP. c/o WILLIAM LEWERENZ
h. Owner's Phone No.: 415. 957. 1888

i. BFI WASTE CODE: CA | 405 | 112295 | 40243 | Containers

j. Description of Waste: TPH CONTAMINATED SOILS
k. Quantity: 20 | Units: T | No. | TYPE: T

TYPE
DM - METAL DRUM
DP - PLASTIC DRUM
B - BAG
BA - 6 MIL. PLASTIC BAG or WRAP
T - TRUCK
O - OTHER

UNITS
P - POUNDS
Y - YARDS
M³ - CUBIC METERS
Y³ - CUBIC YARDS
O - OTHER

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

DAVID ALLEN, ASE, Inc. Agent for Emeryville Prop. [signature] 11 28 95
Generator Authorized Agent Name | Signature | Shipment Date

Section II TRANSPORTER (Generator complete a-d; Transporter I complete e-g; Transporter II complete h-n)

TRANSPORTER I

a. Name: IVORY Smith
b. Address: 1909 Redwood St
VALLEJO CA
c. Driver Name/Title: Smith TRUCKING (PRINT/TYPE)
d. Phone No.: 707-642-6642 e. Truck No.: R127
f. Vehicle License No./State: 4Z32424
Acknowledgement of Receipt of Materials.
g. Ivory Smith (Driver Signature) 11 28 95 (Shipment Date)

TRANSPORTER II

h. Name:
i. Address:
j. Driver Name/Title: (PRINT/TYPE)
k. Phone No.: l. Truck No.:
m. Vehicle License No./State:
Acknowledgement of Receipt of Materials.
n. (Driver Signature) (Shipment Date)

Section III DESTINATION (Generator completes a-d, destination site completes e-f.)

a. Site Name: BFI VASCO RD.
c. Phone No.: 510. 447. 0491
b. Physical Address: VASCO RD
LIVERMORE CA
d. Mailing Address: 4001 VASCO RD.
LIVERMORE CA 94550

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. (Name of Authorized Agent) [signature] 11 28 95 (Receipt Date)

Section IV ASBESTOS (Generator complete a-d, f, g, Operator* completes e.)

a. Operator's* Name: b. Operator's* Phone No.:
c. Operator's* Address:
d. Special Handling Instructions and additional information:

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

e. Operator's* Name & Title:

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV.
If waste is NOT asbestos waste, complete only Sections I, II and III.

No. 606868

Section I. GENERATOR (Generator completes all of Section I)

a. Generator Name: EMERYVILLE PROPERTIES c/o WILLIAM LEWERENZ

b. Generating Location: FORMER CHARLES LOWE COMPANY

c. Address: 699 SECOND STREET
SAN FRANCISCO CA 94107

d. Address: 1400 PARK AVENUE
EMERYVILLE CA 94608

e. Phone No.: 415-957-1888

f. Phone No.: NONE

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: EMERYVILLE PROPERTIES c/o WILLIAM LEWERENZ

h. Owner's Phone No.: 415-957-1888

i. BFI WASTE CODE: CA | 405 | 112295 | 40243 | Containers

j. Description of Waste: TPH CONTAMINATED SOIL

k. Quantity: 20 | Units: T | No. | TYPE: T

TYPE
DM - METAL DRUM
DP - PLASTIC DRUM
B - BAG
BA - 6 MIL. PLASTIC BAG or WRAP
T - TRUCK
O - OTHER

UNITS
P - POUNDS
Y - YARDS
M^3 - CUBIC METERS
Y^3 - CUBIC YARDS
O - OTHER

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

DAVID ALLEN, ASE INC. Agent for Emeryville P.P. | Signature | Shipment Date: 112895

Generator Authorized Agent Name

Section II. TRANSPORTER (Generator complete a-d; Transporter I complete e-g; Transporter II complete h-n)

TRANSPORTER I

a. Name: EARL STEVENS

b. Address: 1155 HARGUS AVE.

c. Driver Name/Title: GOTTAGO-EARL STEVENS (PRINT/TYPE)

d. Phone No.: 644-4593 e. Truck No.: R99

f. Vehicle License No./State: 9C14022

Acknowledgement of Receipt of Materials.

g. Driver Signature | Shipment Date: 112895

TRANSPORTER II

h. Name:

i. Address:

j. Driver Name/Title: (PRINT/TYPE)

k. Phone No.: l. Truck No.:

m. Vehicle License No./State:

Acknowledgement of Receipt of Materials.

n. Driver Signature | Shipment Date

Section III. DESTINATION (Generator completes a-d, destination site completes e-f.)

a. Site Name: BFI VASCO RD

c. Phone No.: 510-447-0491

b. Physical Address: VASCO RD. LIVERMORE

d. Mailing Address: 4001 VASCO RD. LIVERMORE CA 94550

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. Name of Authorized Agent | Signature | Receipt Date: 112895

Section IV. ASBESTOS (Generator complete a-d, f, g, Operator* completes e.)

a. Operator's* Name: b. Operator's* Phone No.:

c. Operator's* Address:

d. Special Handling Instructions and additional information:

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

e. Operator's* Name & Title:

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV.
If waste is NOT asbestos waste, complete only Sections I, II and III.

No. 606866

Section I. GENERATOR (Generator completes all of Section I)

a. Generator Name: EMERYVILLE PROPERTIES c/o WILLIAM LEWERENZ
b. Generating Location: FORMER CHARLES LOWE COMPANY
c. Address: 699 SECOND STREET SAN FRANCISCO CA 94107
d. Address: 1400 PARK AVENUE EMERYVILLE CA 94608
e. Phone No.: 415-957-1888
f. Phone No.: NONE

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: EMERYVILLE PROP. c/o WILLIAM LEWERENZ
h. Owner's Phone No.: 415-957-1888

i. BFI WASTE CODE: CA | 405 | 112295 | 40243

Containers

j. Description of Waste: TPH CONTAMINATED SOIL
k. Quantity: 20 | Units: T | No. | TYPE: T

TYPE
DM - METAL DRUM
DP - PLASTIC DRUM
B - BAG
BA - 6 MIL. PLASTIC BAG or WRAP
T - TRUCK
O - OTHER

UNITS
P - POUNDS
Y - YARDS
M³ - CUBIC METERS
Y³ - CUBIC YARDS
O - OTHER

GENERATOR'S CERTIFICATION: I hereby certify that the above-named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

DAVID ALLEN ASE INC., Agent for Emeryville Prop. [signature] 11 28 95
Generator Authorized Agent Name — Signature — Shipment Date

Section II. TRANSPORTER (Generator complete a-d, Transporter I complete e-g, Transporter II complete h-n)

TRANSPORTER I

a. Name: IVORY SMITH
b. Address: 1909 Redwood St VALLEJO CA
c. Driver Name/Title: SMITH TRUCKING (PRINT/TYPE)
d. Phone No.: 707 642-6642 e. Truck No.: R127
f. Vehicle License No./State: 4Z32426
Acknowledgement of Receipt of Materials.
g. [signature] (Driver Signature) 11 28 95 (Shipment Date)

TRANSPORTER II

h. Name:
i. Address:
j. Driver Name/Title: (PRINT/TYPE)
k. Phone No.: l. Truck No.:
m. Vehicle License No./State:
Acknowledgement of Receipt of Materials.
n. (Driver Signature) (Shipment Date)

Section III. DESTINATION (Generator completes a-d, destination site completes e-f.)

a. Site Name: BFI VASCO RD.
b. Physical Address: VASCO RD. LIVERMORE, CA
c. Phone No.: 510.447.0491
d. Mailing Address: 4001 VASCO RD. LIVERMORE CA 94550
e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. (Name of Authorized Agent) [signature] (Signature) 11 28 95 (Receipt Date)

Section IV. ASBESTOS (Generator complete a-d, f, g; Operator* completes e.)

a. Operator's* Name: b. Operator's* Phone No.:
c. Operator's* Address:
d. Special Handling Instructions and additional information:

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

e. Operator's* Name & Title:

VASCO ROAD SANITARY LANDFILL No: 786726

A DIVISION OF BFI® BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 94550
(510) 447-0491

Date : 11-28-95 Time In: 10:19:36 Time Out: 10:36:52
Ticket # : A66212 CMS # : 1009539 LMS #: 0000999
Customer : CASH
Vehicle # : R99 Lic Plate:
SPECIAL
Manifest # : 606867 PO #: E, PROP. Transporter:
Source Cd : Generator : EMP EMERYVILLE PROPERTIES
Comment : AQUA Science Operator: NOEL
Capacity : 20.00 yd Scale In # : 1 Scale Out #: 2
Gross Wt : 30.21 Tare Wt: 14.64 Net Wt: 15.57 tn

Descr	Actual	Bill Qty	$/Unit	Extended
SOIL		15.57 TN		

Sub Total..... $

Total..... $
Cash Tended... $
Change Due.... $

THANK YOU FOR YOUR BUSINESS!!!
HAVE A GREAT DAY!!!

All children must remain in vehicles. Absolutely no salvaging allowed.

Ninõs deben de permaneceren en los carros a todas horas.

No se permite llevar cosas del dompe absolutamente.

DRIVER

CUSTOMER

VASCO ROAD SANITARY LANDFILL No: 786741

A DIVISION OF BFI® BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 94550
(510) 447-0491

Date : 11-28-95 Time In: 10:41:20 Time Out: 10:57:50
Ticket # : A66224 CMS # : 1009539 LMS #: 0000999
Customer : CASH
Vehicle # : R127 Lic Plate:
SPECIAL
Manifest # : 606866 PO #: Transporter:
Source Cd : Generator : EMP EMERYVILLE PROPERTIES
Comment : AQUA SCIENCE Operator: NOEL
Capacity : 20.00 yd Scale In # : 1 Scale Out #: 2
Gross Wt : 30.83 Tare Wt: 16.17 Net Wt: 14.66 tn

Descr	Actual	Bill Qty	$/Unit	Extended
SOIL		14.66 TN		

Sub Total..... $

Total..... $
Cash Tended... $
Change Due.... $

THANK YOU FOR YOUR BUSINESS!..
HAVE A GREAT DAY!!!

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

All children must remain in vehicles. Absolutely no salvaging allowed.

Ninõs deben de permaneceren en los carros a todas horas.

No se permite llevar cosas del dompe absolutamente.

DRIVER

CUSTOMER

VASCO ROAD SANITARY LANDFILL No: 786839

A DIVISION OF BFI® BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 94550
(510) 447-0491

Date : 11-28-95 Time In: 13:00:26 Time Out: 13:21:42
Ticket # : A66320 CMS # : 1009539 LMS #: 0000999
Customer : CASH
Vehicle # : R99 Lic Plate:
SPECIAL
Manifest # : 606868 PO #: Transporter:
Source Cd : Generator : EMP EMERYVILLE PROPERTIES
Comment : Operator: NOEL
Capacity : 20.00 yd Scale In # : 1 Scale Out #: 2
Gross Wt : 34.34 Tare Wt: 14.58 Net Wt: 19.76 tn

Descr	Actual	Bill Qty	$/Unit	Extended
SOIL		19.76 TN		

Sub Total..... $

Total..... $
Cash Tended... $
Change Due.... $

THANK YOU FOR YOUR BUSINESS!!!
HAVE A GREAT DAY!!!

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

All children must remain in vehicles. Absolutely no salvaging allowed.

Ninõs deben de permaneceren en los carros a todas horas.

No se permite llevar cosas del dompe absolutamente.

DRIVER

CUSTOMER

VASCO ROAD SANITARY LANDFILL No: 786905

A DIVISION OF BFI® BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 94550
(510) 447-0491

Date : 11-28-95 Time In: 15:04:44 Time Out: 15:23:45
Ticket # : A66387 CMS # : 1009539 LMS #: 0000999
Customer : CASH
Vehicle # : R127 Lic Plate:
SPECIAL
Manifest # : 606880 PO #: Transporter:
Source Cd : Generator : EMP EMERYVILLE PROPERTIES
Comment : Operator: NOEL
Capacity : 20.00 yd Scale In # : 1 Scale Out #: 2
Gross Wt : 31.33 Tare Wt: 16.03 Net Wt: 15.30 tn

Descr	Actual	Bill Qty	$/Unit	Extended
SOIL		15.30 TN		

Sub Total..... $

Total..... $
Cash Tended... $
Change Due.... $

THANK YOU FOR YOUR BUSINESS!!!
HAVE A GREAT DAY!!!

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

All children must remain in vehicles. Absolutely no salvaging allowed.

Ninõs deben de permaneceren en los carros a todas horas.

No se permite llevar cosas del dompe absolutamente.

DRIVER

CUSTOMER

SEAPORT PETROLEUM CORPORATION

675 SEAPORT BLVD. REDWOOD CITY, CA 94063

H.M. ☒ Aqua Scavenge 1616

TRUCK LOADING TICKET AND BILL OF LADING

DATE:	TIME:	TRUCK/TRAILER NO.:
10 23 95	1600 (A.M.) P.M.	V.T. 132

CONSIGNOR: SEAPORT PETROLEUM CORPORATION

CONSIGNEE: SEAPORT PETRO

PRODUCT	API/TEMP	GROSS GALLONS	NET GALLONS
WASTE DIESEL AND GASOLINE 3, UN 1203 P.G. II		350	GALS
DIESEL FUEL 3, NA 1993 P.G. III LOW SULFUR 0.05% MAX			
DIESEL FUEL 3, NA 1993 P.G. III HIGH SULFUR			
METHYL TERTIARY BUTYL ETHER 3, P.G. III UN 2398			
ETHANOL 3, UN 1170 P.G. II			

METER READING — GROSS GALLONS:

CARRIER: FIRST ENV

CARRIER CERTIFIES THAT THE CONTAINER SUPPLIED FOR THIS SHIPMENT IS A PROPER CONTAINER FOR THE TRANSPORTATION OF THIS COMMODITY AS DESCRIBED ABOVE.

DESTINATION: RED WOOD city CA

PRODUCT REC'D IN GOOD ORDER: [signature]

IN EVENT OF HAZARDOUS MATERIAL INCIDENT CALL: CHEMTREC 1-800-424-9300

ACCOUNTING

PRECISION BUSINESS FORMS 602/254-6655

First Environmental Group
3501 Collins Avenue
Richmond, CA 94806
(510) 232-0202
Fax (510) 232-5844

000748

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name: SEAPORT ENVIRONMENTAL GROUP
Address: 675 SEAPORT BL
REDWOOD CITY CA.
Phone No. 415 - 364 1024

Generating Location: FORMAL CHROME FACILITY
Address: 1400 PARK AVE
EMERYVILLE CA
Phone No. 510 - 820 9391

Description of Waste	Quantity	Units	Containers No.	Containers Type
200 GAL-DO RINSE WATER	00200	G	01	T

Type: D - Drum, C - Carton, B - Bag, T - Truck, P - Pounds, Y - Yards, O - Other

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Generator Authorized Agent Name: _____ Signature: Agua Science Eng. Shipment Date: 102395

TRANSPORTER

Truck No. VT132
Transporter Name: FIRST ENVIRONMENTAL GROUP
Address: 3501 Collins Ave
Richmond Ca.

Phone No. (510) 232-0202
Driver Name (Print): GLENN A OLSON
Vehicle License No./State: CA 3H19532
Vehicle Certification: 610148

I hereby certify that the above named materials was picked up at the generator site listed above.
Driver Signature: _____ Shipment Date: 102395

I hereby certify that the above named materials was delivered without incident to the destination listed below.
Driver Signature: _____ Delivery Date: 102395

DESTINATION

Site Name: SEAPORT ENVIRONMENTAL Phone No. 415 - 364 1024
Address: 675 Seaport Blvd, RWC, CA 94063

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent: _____ Signature: AMY CHILDRESS Receipt Date: 102395

MAY-07-1900 13:45 FROM TO PHOENIX P.02

APPENDIX C

TANK DISPOSAL CERTIFICATES

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 18143

CUSTOMER
AQUA SCIENCE E
JOB NO.
966845

FOR: ERICKSON, INC. TANK NO. 16728

LOCATION: RICHMOND DATE: 95/10/24 TIME: 13:36

TEST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT D

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 550 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1%
ERICKSON, INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.
ERICKSON, INC. HAS THE APPROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

REPRESENTATIVE TITLE INSPECTOR

CP5995

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 18144

CUSTOMER
AQUA SCIENCE E
JOB NO.
966845

FOR: ERICKSON, INC. TANK NO. 16722

LOCATION: RICHMOND DATE: 95/10/24 TIME: 13:37

TEST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT GAS

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 550 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1%
ERICKSON, INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.
ERICKSON, INC. HAS THE APPROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

REPRESENTATIVE TITLE INSPECTOR

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 18145

CUSTOMER
AQUA SCIENCE E
JOB NO.
966845

FOR: ERICKSON, INC. TANK NO. 16721

LOCATION: RICHMOND DATE: 95/10/24 TIME: 13:39

TEST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT UG

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 550 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1%
ERICKSON, INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.
ERICKSON, INC. HAS THE APPROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

REPRESENTATIVE TITLE INSPECTOR

CP599

APPENDIX D

LABORATORY ANALYSES
and
CHAIN OF CUSTODY SHEETS

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Aqua Science Engineers, Inc. 2411 Old Crow Canyon Rd., # 4 San Ramon, CA 94583	Client Project ID: # 2908; Emeryville Properties	Date Sampled: 10/23/95
		Date Received: 10/24/95
	Client Contact: Dave Allen	Date Extracted: 10/25/95
	Client P.O:	Date Analyzed: 10/26-10/30/95

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylben-zene	Xylenes	% Rec. Surrogate
57782	North, 9'	S	140,j/e	ND< 0.05	0.55	0.81	7.4	95
57783	Middle, 9'	S	1300,j/e	0.41	6.1	13	110	100
57784	South, 9'	S	1100,j/e	0.22	5.6	5.0	33	101
57785	North, 12'	S	ND	ND	ND	ND	ND	102
57786	South, 12'	S	ND	ND	ND	ND	0.027	101
57787	STKP	S	850,j/e	ND< 0.04	1.9	3.8	40	95
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, soil samples in ng/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak coelutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (Stoddard solvent?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Aqua Science Engineers, Inc. 2411 Old Crow Canyon Rd., # 4 San Ramon, CA 94583	Client Project ID: # 2908; Emeryville Properties	Date Sampled: 10/23/95
		Date Received: 10/24/95
	Client Contact: Dave Allen	Date Extracted: 10/26/95
	Client P.O:	Date Analyzed: 10/26-10/28/95

Diesel Range (C10-C23), Motor Oil Range (> C18) Extractable Hydrocarbons as Diesel & Motor Oil *

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)+	TPH(mo)+	% Recovery Surrogate
57782	North, 9'	S	4800,g,e/d	14,000	114#
57783	Middle, 9'	S	2600,g,e	8000	90
57784	South, 9'	S	2100,g,e	5800	--#
57785	North, 12'	S	ND	ND	94
57786	South, 12'	S	ND	ND	95
57787	STKP	S	2900,g,d/e	6700	99
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	250 ug/L	
		S	1.0 mg/kg	5.0 mg/kg	

* water samples are reported in ug/L, soil samples in mg/kg, and all TCLP and STLC extracts in mg/L

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (Stoddard solvent?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Aqua Science Engineers, Inc. 2411 Old Crow Canyon Rd., # 4 San Ramon, CA 94583	Client Project ID: # 2908; Emeryville Properties	Date Sampled: 10/23/95
		Date Received: 10/24/95
	Client Contact: Dave Allen	Date Extracted: 10/26/95
	Client P.O:	Date Analyzed: 10/26/95

Lead*

EPA analytical methods 6010/200.7, 239.2+

Lab ID	Client ID	Matrix	Extraction°	Lead*	% Recovery Surrogate
57782	North, 9'	S	TTLC	66	95
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		S	TTLC	3.0 mg/kg	
		W	TTLC	0.005 mg/L	
		---	STLC,TCLP	0.2 mg/L	

* soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

+ Lead is analysed using EPA method 6010 (ICP)for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

o EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC from CA Title 22

surrogate diluted out of range; N/A means surrogate not applicable to this analysis

i) liquid sample that contains greater than ~ 2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 10/26/95 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.000	2.053	2.028	2.03	101	100	1.2
Benzene	0.000	0.186	0.192	0.2	93	96	3.2
Toluene	0.000	0.188	0.196	0.2	94	98	4.2
Ethylbenzene	0.000	0.188	0.194	0.2	94	97	3.1
Xylenes	0.000	0.570	0.578	0.6	95	96	1.4
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	0.0	17.9	18.4	20.8	86	88	2.8

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 10/27/95 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.000	2.053	2.028	2.03	101	100	1.2
Benzene	0.000	0.186	0.192	0.2	93	96	3.2
Toluene	0.000	0.188	0.196	0.2	94	98	4.2
Ethylbenzene	0.000	0.188	0.194	0.2	94	97	3.1
Xylenes	0.000	0.570	0.578	0.6	95	96	1.4
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 10/28/95 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.000	1.827	1.802	2.03	90	89	1.4
Benzene	0.000	0.192	0.182	0.2	96	91	5.3
Toluene	0.000	0.198	0.188	0.2	99	94	5.2
Ethylbenzene	0.000	0.204	0.194	0.2	102	97	5.0
Xylenes	0.000	0.630	0.600	0.6	105	100	4.9
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 10/30/95 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.000	2.095	2.092	2.03	103	103	0.2
Benzene	0.000	0.198	0.184	0.2	99	92	7.3
Toluene	0.000	0.200	0.186	0.2	100	93	7.3
Ethylbenzene	0.000	0.200	0.186	0.2	100	93	7.3
Xylenes	0.000	0.590	0.552	0.6	98	92	6.7
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR AA METALS

Date: 10/26/95 Matrix: Soil

Analyte	Concentration (mg/kg,mg/L) Sample	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
Total Lead	0.0	4.7	4.7	5	94	93	0.2
Total Cadmium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Nickel	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Zinc	N/A	N/A	N/A	N/A	N/A	N/A	N/A
STLC Lead	0.00	4.96	4.94	5.0	99	99	0.4
TCLP Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

*5123 AASEX8

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Road, #4,
San Ramon, CA 94583
(510) 820-9391 - FAX (510) 837-4853

Chain of Custody

DATE 10-23-95 PAGE 1 OF 1

SAMPLERS (SIGNATURE) D. Allen (PHONE NO.) 820-9391

PROJECT NAME EMERYVILLE PROPERTIES NO. 2908

ADDRESS

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH: GASOLINE (EPA 5030/8015)	TPH: GASOLINE/BTEX (EPA 5030/8015-8020)	TPH: DIESEL (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NUETRALS, ACIDS (EPA 625/8270)	OIL & GREASE (EPA 5520 E&F or B&F)	LUFT METALS (5) (EPA 6010+7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGNITABILITY	COMPOSITE INTO 1	TOTAL EXTRACTABLE HYD. FULL RANGE	TOTAL LEAD			
NORTH, 9'	10/23	16:10	SOIL	1		X													X	X		
MIDDLE, 9'		16:20		1		X													X			
SOUTH, 9'		16:30		1		X													X			
NORTH, 12'		17:10		1		X													X			
SOUTH, 12'		17:0		1		X													X			
STKP		18:05		3		X												X	X			

57782
57783
57784
57785
57786
57787

VOAS [O&G] METALS OTHER

ICE/T° ✓
COOL CONDITION ✓
HEAD SPACE ABSENT ✓

PRESERVATIVE ✓
APPROPRIATE ✓
CONTAINERS ✓

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
D. Allen 14:07	Michael Dubois 14:07	Michael Dubois 17:45	Angela Rydelius 17:45	STANDARD T.A.T.
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
D. Allen 10-24-95	Michael DuBois 10/23/95	Michael Dubois 10/24/95	Angela Rydelius 10/24/95	
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE, Inc.	Company- ASE	Company- ASE	Company- McCampbell Analytical	

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Aqua Science Engineers, Inc. 2411 Old Crow Canyon Rd., # 4 San Ramon, CA 94583	Client Project ID: # 2908; Emeryville Properties	Date Sampled: 10/23/95
		Date Received: 10/24/95
	Client Contact: Dave Allen	Date Extracted: 11/13-11/15/95
	Client P.O:	Date Analyzed: 11/16/95

Lead*

EPA analytical methods 6010/200.7, 239.2+

Lab ID	Client ID	Matrix	Extraction°	Lead*	% Recovery Surrogate
57782	North, 9'	S	STLC	2.0	NA
57785	North, 12'	S	TTLC	6.3	102
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		S	TTLC	3.0 mg/kg	
		W	TTLC	0.005 mg/L	
		---	STLC,TCLP	0.2 mg/L	

* soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

+ Lead is analysed using EPA method 6010 (ICP)for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

o EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC from CA Title 22

surrogate diluted out of range; N/A means surrogate not applicable to this analysis

i) liquid sample that contains greater than ~ 2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR AA METALS

Date: 11/16/95 Matrix: Soil

Analyte	Concentration (mg/kg, mg/L) Sample	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
Total Lead	0.0	4.9	5.0	5	98	100	1.6
Total Cadmium	0.0	5.3	5.2	5	105	104	1.1
Total Chromium	0.0	5.1	5.1	5	103	103	0.0
Total Nickel	0.0	5.0	5.0	5	100	100	0.2
Total Zinc	0.0	5.1	5.1	5	102	102	0.2
STLC Lead	0.00	4.90	4.83	5.0	98	97	1.4
Organic Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

5123A
#5123AASEX8

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Road, #4,
San Ramon, CA 94583
(510) 820-9391 - FAX (510) 837-4853

Chain of Custody

DATE 10-23-95 PAGE 1 OF 1

SAMPLERS (SIGNATURE) D. Allen (PHONE NO.) 820-9391

PROJECT NAME EMERYVILLE PROPERTIES NO. 2.908

ADDRESS

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH- GASOLINE (EPA 5030/8015)	TPH- GASOLINE/BTEX (EPA 5030/8015-8020)	TPH- DIESEL (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NUETRALS, ACIDS (EPA 625/8270)	OIL & GREASE (EPA 5520 E&F or B&F)	LUFT METALS (5) (EPA 6010+7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGNITABILITY	COMPOSITE	TOTAL EXTRACTABLE HYD. FUEL ANALYSIS	TOTAL LEAD	STLC Pb	
NORTH, 9'	10/23	16:10	SOIL	1		X								57782					X	X	X RUSH 11-13 pm	
MIDDLE, 9'		16:20		1		X								57783					X			
SOUTH, 9'		16:30		1		X								57784					X	X 72 Hr 11-13 pm		
NORTH, 12'		17:10		1		X								57785				X	X			
SOUTH, 12'		17:0		1		X								57786								
STKP	↓	18:05	↓	3		X								57787								

VOAs [illegible] PRESERVATIVE APPROPRIATE CONTAINERS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
D. Allen 14:07	Michael Dubois 14:07	Michael Dubois 17:45	Angela Rydelius 17:45	STANDARD T.A.T.
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
D. Allen 10-24-95	Michael DuBois 10/23/95	Michael Dubois 10/24/95	Angela Rydelius 10/24/95	
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE, Inc.	Company- ASE	Company- ASE	Company- McCampbell Analytical	

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Aqua Science Engineers, Inc. 2411 Old Crow Canyon Rd., # 4 San Ramon, CA 94583	Client Project ID: # 2908; Emeryville Properties	Date Sampled: 11/13/95
		Date Received: 11/14/95
	Client Contact: David Allen	Date Extracted: 11/17/95
	Client P.O:	Date Analyzed: 11/17-11/19/95

Volatile Organics By GC/MS

EPA method 624 or 8240

Lab ID	58676
Client ID	STKP-11/13
Matrix	S

Compound	Concentration*	Reporting Limit W	Reporting Limit S	Compound	Concentration*	Reporting Limit W	Reporting Limit S
Acetone (b)	ND< 100	0.5	5	cis-1,3-Dichloropropene	ND< 100	0.5	5
Benzene	ND< 100	0.5	5	trans-1,3-Dichloropropene	ND< 100	0.5	5
Bromodichloromethane	ND< 100	0.5	5	Ethylbenzene	340	0.5	5
Bromoform	ND< 100	0.5	5	Methyl butyl ketone (d)	ND< 100	0.5	5
Bromomethane	ND< 100	0.5	5	Methylene Chloride(e)	ND< 100	0.5	5
Carbon Disulfide	ND< 100	0.5	5	Methyl ethyl ketone (f)	ND< 100	0.5	5
Carbon Tetrachloride	ND< 100	0.5	5	Methyl isobutyl ketone (g)	ND< 100	0.5	5
Chlorobenzene	ND< 100	0.5	5	Styrene (k)	ND< 100	0.5	5
Chloroethane	ND< 100	0.5	5	1,1,2,2-Tetrachloroethane	ND< 100	0.5	5
2-Chloroethyl Vinyl Ether(c)	ND< 100	0.5	5	Tetrachloroethene	ND< 100	0.5	5
Chloroform	ND< 100	0.5	5	Toluene (l)	ND< 100	0.5	5
Chloromethane	ND< 100	0.5	5	1,1,1-Trichloroethane	ND< 100	0.5	5
Dibromochloromethane	ND< 100	0.5	5	1,1,2-Trichloroethane	ND< 100	0.5	5
1,2-Dichlorobenzene	ND< 100	0.5	5	Trichloroethene	ND< 100	0.5	5
1,3-Dichlorobenzene	ND< 100	0.5	5	Trichlorofluoromethane	ND< 100	0.5	5
1,4-Dichlorobenzene	ND< 100	0.5	5	Vinyl Acetate (m)	ND< 100	0.5	5
1,1-Dichloroethane	ND< 100	0.5	5	Vinyl Chloride (n)	ND< 100	0.5	5
1,2-Dichloroethane	ND< 100	0.5	5	Xylenes, total (o)	5200	0.5	5
1,1-Dichloroethene	ND< 100	0.5	5	**Surrogate Recoveries (%)**			
cis-1,2-Dichloroethene	ND< 100	0.5	5	Dibromofluoromethane	112		
trans-1,2-Dichloroethene	ND< 100	0.5	5	Toluene-d8	98		
1,2-Dichloropropane	ND< 100	0.5	5	4-Bromofluorobenzene	108		

Comments: j

* water and vapor samples are reported in ug/L, soil samples in ug/kg and all TCLP extracts in ug/L

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~ 5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Aqua Science Engineers, Inc. 2411 Old Crow Canyon Rd., # 4 San Ramon, CA 94583	Client Project ID: # 2908; Emeryville Properties	Date Sampled: 11/13/95
		Date Received: 11/14/95
	Client Contact: David Allen	Date Extracted: 11/14/95
	Client P.O:	Date Analyzed: 11/14-11/16/95

CAM / CCR 17 Metals*

EPA methods 6010/200.7; 7470/245.1 (Hg); 7060/206.2 (As); 7740/270.2 (Se); 7841/279.2 (Tl); 239.2 (Pb, water matrix)

Lab ID	58676				Reporting Limit		
Client ID	STKP-11/13						
Matrix	S				S	W	STLC / TCLP
Extraction°	TTLC				TTLC	TTLC	
Compound	Concentration*				mg/kg	mg/L	mg/L
Antimony (Sb)	ND				2.5	0.05	0.05
Arsenic (As)	5.7				2.5	0.005	0.25
Barium (Ba)	150				1.0	0.05	0.05
Beryllium (Be)	ND				0.5	0.01	0.01
Cadmium (Cd)	0.64				0.5	0.01	0.01
Chromium (Cr)	34				0.5	0.005	0.05
Cobalt (Co)	8.5				2.0	0.02	0.05
Copper (Cu)	61				2.0	0.02	0.05
Lead (Pb)	60				3.0	0.005	0.2
Mercury (Hg)	ND				0.06	0.0008	0.0008
Molybdenum (Mo)	ND				2.0	0.05	0.05
Nickel (Ni)	46				2.0	0.02	0.05
Selenium (Se)	ND				2.5	0.005	0.25
Silver (Ag)	ND				1.0	0.01	0.05
Thallium (Tl)	ND				0.5	0.001	0.05
Vanadium (V)	28				2.0	0.05	0.05
Zinc (Zn)	100				1.0	0.05	0.05
% Recovery Surrogate	94						
Comments							

* water samples are reported in mg/L, soil samples in mg/kg and all TCLP & STLC extracts in mg/L

ND means not detected above the reporting limit

o EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC from CA Title 22

surrogate diluted out of range; N/A means surrogate not applicable to this analysis

i) liquid sample that contains greater than ~ 2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Aqua Science Engineers, Inc. 2411 Old Crow Canyon Rd., # 4 San Ramon, CA 94583	Client Project ID: # 2908; Emeryville Properties	Date Sampled: 11/13/95
		Date Received: 11/14/95
	Client Contact: David Allen	Date Extracted: 11/17-11/19/95
	Client P.O:	Date Analyzed: 11/20/95

Lead*

EPA analytical methods 6010/200.7, 239.2+

Lab ID	Client ID	Matrix	Extraction°	Lead*	% Recovery Surrogate
58676	STKP-11/13	S	STLC	1.1	NA
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		S	TTLC	3.0 mg/kg	
		W	TTLC	0.005 mg/L	
		---	STLC,TCLP	0.2 mg/L	

* soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

+ Lead is analysed using EPA method 6010 (ICP)for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

o EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC from CA Title 22

surrogate diluted out of range; N/A means surrogate not applicable to this analysis

i) liquid sample that contains greater than ~ 2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Aqua Science Engineers, Inc. 2411 Old Crow Canyon Rd., # 4 San Ramon, CA 94583	Client Project ID: # 2908; Emeryville Properties	Date Sampled: 11/13/95
		Date Received: 11/14/95
	Client Contact: David Allen	Date Extracted: 11/16/95
	Client P.O:	Date Analyzed: 11/16/95

RCI (Reactivity, Corrosivity & Ignitability)

CA Title 22, Section 66261.21-66261.23

Lab ID	Client ID	Matrix	Reactivity+	Corrosivity (pH)	Ignitability°
58676	STKP-11/13	S	negative	6.60	negative

+ negative means no obvious reaction with water, no evolution of gas upon contact with water, appears to contain no reactive cyanide or sulfide (< ~ 5 mg/kg cyanide and 50mg/kg sulfide by EPA SW-846, chapter 7, modified), and shows no indication of explosivity.

o negative for a soil means the absence of spontaineous combustion and the absence of flammability upon exposure to a naked flame.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR VOCs (EPA 8240/8260)

Date: 11/17/95-11/19/95 Matrix: Soil

Analyte	Concentration (ug/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
1,1-Dichloroethe	0.0	90.3	81.4	100	90	81	10.4
Trichloroethene	0.0	85.4	76.8	100	85	77	10.6
EDB	0.0	101.0	90.5	100	101	91	11.0
Chlorobenzene	0.0	111.0	99.0	100	111	99	11.4
Benzene	0.0	104.7	91.6	100	105	92	13.3
Toluene	0.0	109.0	94.1	100	109	94	14.7

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR METALS

Date: 11/16/95 Matrix: Soil

Extraction: TTLC

Analyte	Concentration (mg/kg,mg/L)			Amount	% Recovery		RPD
	Sample	MS	MSD	Spiked	MS	MSD	
Arsenic	0.0	4.6	4.3	5.0	92	87	5.7
Selenium	0.0	4.5	4.1	5.0	90	83	8.7
Molybdenum	0.0	4.5	4.2	5.0	90	84	6.4
Silver	0.0	0.5	0.4	0.5	93	85	8.6
Thallium	0.0	4.6	4.1	5.0	92	82	11.4
Barium	0.0	4.4	4.1	5.0	89	82	7.7
Nickel	0.0	4.6	4.2	5.0	92	84	8.9
Chromium	0.0	4.7	4.4	5.0	94	88	6.4
Vanadium	0.0	4.5	4.1	5.0	89	81	9.1
Beryllium	0.0	4.8	4.4	5.0	96	88	9.3
Zinc	0.0	4.6	4.3	5.0	92	85	7.5
Copper	0.0	4.5	4.1	5.0	90	81	10.0
Antimony	0.0	4.5	4.1	5.0	89	83	7.7
Lead	0.0	4.5	4.2	5.0	91	85	7.1
Cadmium	0.0	4.8	4.5	5.0	95	91	4.8
Cobalt	0.0	4.7	4.3	5.0	94	86	9.5
Mercury	0.000	0.202	0.202	0.25	81	81	0.0

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR AA METALS

Date: 11/20/95 Matrix: Soil

Analyte	Concentration (mg/kg,mg/L) Sample	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
Total Lead	0.0	4.2	4.1	5	83	81	2.2
Total Cadmium	0.0	4.3	4.2	5	85	84	1.4
Total Chromium	0.0	4.3	4.2	5	85	83	1.9
Total Nickel	0.0	4.1	4.1	5	82	81	0.5
Total Zinc	0.0	4.0	4.0	5	81	80	0.7
STLC Lead	0.00	5.20	4.77	5.0	104	95	8.6
Organic Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

CHROMALAB, INC.

Environmental Services (SDB)

November 17, 1995 *Submission #:* 9511222

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: A.S./E.P. *Project#:* 5271
Received: November 14, 1995

re: One sample for Semivolatile Organics (BNAs) analysis.
Method: EPA 3550/8270

SampleID: **STKP-11/13**
Sample #: 110472 *Matrix:* SOIL *Extracted:* November 14, 1995
Sampled: November 13, 1995 *Run:* 9371-A *Analyzed:* November 16, 1995

Analyte	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE RESULT (%)
PHENOL	N.D.	1.0	N.D.	--
BIS(2-CHLOROETHYL)ETHER	N.D.	1.0	N.D.	--
2-CHLOROPHENOL	N.D.	1.0	N.D.	74
1,3-DICHLOROBENZENE	N.D.	1.0	N.D.	--
1,4-DICHLOROBENZENE	N.D.	1.0	N.D.	--
BENZYL ALCOHOL	N.D.	2.0	N.D.	--
1,2-DICHLOROBENZENE	N.D.	1.0	N.D.	--
o-METHYLPHENOL	N.D.	1.0	N.D.	--
BIS(2-CHLOROISOPROPYL)ETHER	N.D.	1.0	N.D.	--
m+p-METHYLPHENOL	N.D.	2.0	N.D.	--
N-NITROSO-DI-N-PROPYLAMINE	N.D.	1.0	N.D.	64
HEXACHLOROETHANE	N.D.	1.0	N.D.	--
NITROBENZENE	N.D.	1.0	N.D.	--
ISOPHORONE	N.D.	1.0	N.D.	--
2-NITROPHENOL	N.D.	1.0	N.D.	--
2,4-DIMETHYLPHENOL	N.D.	1.0	N.D.	--
BIS(2-CHLOROETHOXY)METHANE	N.D.	1.0	N.D.	--
2,4-DICHLOROPHENOL	N.D.	1.0	N.D.	--
1,2,4-TRICHLOROBENZENE	N.D.	1.0	N.D.	62
NAPHTHALENE	2.0	1.0	N.D.	--
4-CHLOROANILINE	N.D.	2.0	N.D.	--
HEXACHLOROBUTADIENE	N.D.	1.0	N.D.	--
4-CHLORO-3-METHYLPHENOL	N.D.	2.0	N.D.	89
2-METHYLNAPHTHALENE	3.2	1.0	N.D.	--
HEXACHLOROCYCLOPENTADIENE	N.D.	1.0	N.D.	--
2,4,6-TRICHLOROPHENOL	N.D.	1.0	N.D.	--
2,4,5-TRICHLOROPHENOL	N.D.	1.0	N.D.	--
2-CHLORONAPHTHALENE	N.D.	5.0	N.D.	--
2-NITROANILINE	N.D.	1.0	N.D.	--
DIMETHYL PHTHALATE	N.D.	5.0	N.D.	--
ACENAPHTHYLENE	N.D.	1.0	N.D.	--
3-NITROANILINE	N.D.	5.0	N.D.	--
ACENAPHTHENE	N.D.	1.0	N.D.	71
2,4-DINITROPHENOL	N.D.	5.0	N.D.	--
4-NITROPHENOL	N.D.	5.0	N.D.	--
DIBENZOFURAN	N.D.	1.0	N.D.	--
2,4-DINITROTOLUENE	N.D.	1.0	N.D.	--
2,6-DINITROTOLUENE	N.D.	2.0	N.D.	--
DIETHYL PHTHALATE	N.D.	5.0	N.D.	--

CHROMALAB, INC.

Environmental Services (SDB)

November 17, 1995 *Submission #:* 9511222

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: A.S./E.P. *Project#:* 5271
Received: November 14, 1995

re: One sample for Semivolatile Organics (BNAs) analysis, continued.
Method: EPA 3550/8270

SampleID: **STKP-11/13**
Sample #: 110472 *Matrix:* SOIL *Extracted:* November 14, 1995
Sampled: November 13, 1995 *Run:* 9371-A *Analyzed:* November 16, 1995

Analyte	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE RESULT (%)
4-CHLOROPHENYL PHENYL ETHER	N.D.	1.0	N.D.	--
FLUORENE	N.D.	1.0	N.D.	--
4-NITROANILINE	N.D.	5.0	N.D.	--
4,6-DINITRO-2-METHYLPHENOL	N.D.	5.0	N.D.	--
N-NITROSO-DI-N-PHENYLAMINE	N.D.	1.0	N.D.	--
4-BROMOPHENYL PHENYL ETHER	N.D.	1.0	N.D.	--
HEXACHLOROBENZENE	N.D.	1.0	N.D.	--
PENTACHLOROPHENOL	N.D.	5.0	N.D.	68
PHENATHRENE	N.D.	1.0	N.D.	--
ANTHRACENE	N.D.	1.0	N.D.	--
DI-N-BUTYL PHTHALATE	N.D.	5.0	N.D.	--
FLUORANTHENE	N.D.	1.0	N.D.	--
PYRENE	N.D.	1.0	N.D.	55
BUTYL BENZYL PHTHALATE	N.D.	5.0	N.D.	--
3,3'-DICHLOROBENZIDINE	N.D.	2.0	N.D.	--
BENZO(A)ANTHRACENE	N.D.	1.0	N.D.	--
BIS(2-ETHYLHEXYL)PHTHALATE	6.6	5.0	N.D.	--
CHRYSENE	N.D.	1.0	N.D.	--
DI-N-OCTYL PHTHALATE	N.D.	5.0	N.D.	--
BENZO(B)FLUORANTHENE	N.D.	1.0	N.D.	--
BENZO(K)FLUORANTHENE	N.D.	2.0	N.D.	--
BENZO(A)PYRENE	N.D.	0.5	N.D.	--
INDENO(1,2,3 C,D)PYRENE	N.D.	2.0	N.D.	--
DIBENZ(A,H)ANTHRACENE	N.D.	2.0	N.D.	--
BENZ(G,H,I)PERYLENE	N.D.	2.0	N.D.	--

For above analyte: *REPORTING LIMITS RAISED BY 10X DUE TO MATRIX INTERFERENCE*

Alex Tam
Chemist

Eric Tam
Laboratory Director

C.V. 22671 10 FTC

24994

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
(510) 798-1620 PACHECO, CA 94553 FAX (510) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☐ 5 DAY

REPORT TO: Ed Hamilton BILL TO: MAI

COMPANY: McCampbell

TELE: ABOVE FAX #:

PROJECT NUMBER: 5271 PROJECT NAME: A.S./E.P.

PROJECT LOCATION: SAMPLER SIGNATURE:

SAMPLE ID	LOCATION	SAMPLING DATE	SAMPLING TIME	# CONTAINERS	TYPE CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	METHOD PRESERVED: HCL	HNO_3	OTHER	ANALYSIS REQUEST: BTEX & TPH as Gasoline (602/8020 & 8015)	THP as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/5520 B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601/8010	EPA 602/8020	EPA 608/8080	EPA 608/8080 - PCBs Only	EPA 624/8240/8260	EPA 625/8270	CAM - 17 Metals	EPA - Priority Pollutant Metals	LEAD (7240/7421/239.2/6010)	ORGANIC LEAD	RCI	OTHER	COMMENTS
STKP-11/13	Emeryville	11-13-95	14:05	1	VOA		X						X										X							58676

RUSH

SUBM #: 9511222 REP: GC
CLIENT: MCCAM
DUE: 11/17/95
REF #:24994

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
Heidi Rucker	11/14/95	1446	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
Peter Hook	11-14-95	15:10	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY LABORATORY: 11/14/95 1510 Mimie Pak

REMARKS: 72 HR. TAT

AASEX16 5271

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Road, #4,
San Ramon, CA 94583
(510) 820-9391 - FAX (510) 837-4853

Chain of Custody

DATE 11-13-95 PAGE 1 OF 1

SAMPLERS (SIGNATURE) D. Allen (PHONE NO.) 820-9391

PROJECT NAME EMERYVILLE PROPERTIES NO. 2908

ADDRESS EMERYVILLE, CA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GASOLINE (EPA 5030/8015)	TPH-GASOLINE/BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NUETRALS, ACIDS (EPA 625/8270)	OIL & GREASE (EPA 5520 E&F or B&F)	LUFT METALS (5) (EPA 6010+7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGNITABILITY	STLC Pb 11-17-95 Due 11-22-95	Composite 4 into 1			
STKP-11/13	11/13	14:05	Soil	4						X	X			X			X	X	X			

58676

ISOLATE CODE CONDITION HEAD SPACE ABSENT

PRESERVATIVE APPROPRIATE CONTAINERS

VOA/TOGG LOG

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
D. Allen 10:30	DON DELLARD #730	Don Dellard #730	Heidi Ricca 11:05	3-DAY RESULTS.
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
D. Allen 11/14/95	Don Dellard 10:30	Don Dellard 11/14/95	Heidi Ricca 11-14-95	
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE	Company- ACRO 11/14/95	Company- ACRO 11:05	Company- McCampbell	

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Aqua Science Engineers, Inc. 2411 Old Crow Canyon Rd., # 4 San Ramon, CA 94583	Client Project ID: Emeryville Properties	Date Sampled: 11/06/95
		Date Received: 11/06/95
	Client Contact: Robert Kitay	Date Extracted: 11/08/95
	Client P.O:	Date Analyzed: 11/08/95

Diesel Range (C10-C23), Motor Oil Range (> C18) Extractable Hydrocarbons as Diesel & Motor Oil *

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)+	TPH(mo)+	% Recovery Surrogate
58290	MW-1	W	ND	ND	97
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	250 ug/L	
		S	1.0 mg/kg	5.0 mg/kg	

* water samples are reported in ug/L, soil samples in mg/kg, and all TCLP and STLC extracts in mg/L

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Aqua Science Engineers, Inc. 2411 Old Crow Canyon Rd., # 4 San Ramon, CA 94583	Client Project ID: Emeryville Properties	Date Sampled: 11/06/95
		Date Received: 11/06/95
	Client Contact: Robert Kitay	Date Extracted: 11/06-11/07/95
	Client P.O:	Date Analyzed: 11/06-11/07/95

Volatile Organics By GC/MS

EPA method 624 or 8240

Lab ID	58290
Client ID	MW-1
Matrix	W

Compound	Concentration*	Reporting Limit W	Reporting Limit S	Compound	Concentration*	Reporting Limit W	Reporting Limit S
Acetone (b)	ND	2	5	cis-1,3-Dichloropropene	ND	2	5
Benzene	ND	2	5	trans-1,3-Dichloropropene	ND	2	5
Bromodichloromethane	ND	2	5	Ethylbenzene	ND	2	5
Bromoform	ND	2	5	Methyl butyl ketone (d)	ND	2	5
Bromomethane	ND	2	5	Methylene Chloride(e)	ND	2	5
Carbon Disulfide	ND	2	5	Methyl ethyl ketone (f)	ND	3	5
Carbon Tetrachloride	ND	2	5	Methyl isobutyl ketone (g)	ND	2	5
Chlorobenzene	ND	2	5	Styrene (k)	ND	2	5
Chloroethane	ND	2	5	1,1,2,2-Tetrachloroethane	ND	2	5
2-Chloroethyl Vinyl Ether(c)	ND	2	5	Tetrachloroethene	7.9	2	5
Chloroform	ND	2	5	Toluene (l)	4.0	2	5
Chloromethane	ND	2	5	1,1,1-Trichloroethane	ND	2	5
Dibromochloromethane	ND	2	5	1,1,2-Trichloroethane	ND	2	5
1,2-Dichlorobenzene	ND	2	5	Trichloroethene	5.8	2	5
1,3-Dichlorobenzene	ND	2	5	Trichlorofluoromethane	ND	2	5
1,4-Dichlorobenzene	ND	2	5	Vinyl Acetate (m)	ND	2	5
1,1-Dichloroethane	ND	2	5	Vinyl Chloride (n)	ND	2	5
1,2-Dichloroethane	ND	2	5	Xylenes, total (o)	7.8	2	5
1,1-Dichloroethene	ND	2	5	**Surrogate Recoveries (%)**			
cis-1,2-Dichloroethene	2.6	2	5	Dibromofluoromethane	105		
trans-1,2-Dichloroethene	ND	2	5	Toluene-d8	101		
1,2-Dichloropropane	ND	2	5	4-Bromofluorobenzene	94		

Comments:

* water and vapor samples are reported in ug/L, soil samples in ug/kg and all TCLP extracts in ug/L

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~ 5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 11/08/95-11/09/95 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	96.4	97.6	100	96	98	1.3
Benzene	0	10.3	10	10	103.0	100.0	3.0
Toluene	0	10.4	10.1	10	104.0	101.0	2.9
Ethyl Benzene	0	10.5	10.3	10	105.0	103.0	1.9
Xylenes	0	32	31.5	30	106.7	105.0	1.6
TPH (diesel)	0	155	157	150	104	104	0.8
TRPH (oil & grease)	0	19900	19900	23700	84	84	0.0

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR VOCs (EPA 624/8240/8260)

Date: 11/06/95-11/07/95 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
1,1-Dichloroethe	0.00	8.73	8.33	10.0	87	83	4.7
Trichloroethene	0.00	8.00	7.50	10.0	80	75	6.5
EDB	0.00	9.59	9.32	10.0	96	93	2.9
Chlorobenzene	0.00	10.40	9.78	10.0	104	98	6.1
Benzene	0.00	9.92	9.53	10.0	99	95	4.0
Toluene	0.00	9.19	8.60	10.0	92	86	6.6

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

5212AASEX16

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Road, #4,
San Ramon, CA 94583
(510) 820-9391 - FAX (510) 837-4853

Chain of Custody

DATE 11-6-95 PAGE 1 OF 1

SAMPLERS (SIGNATURE) Robert E. Kitay (PHONE NO.) (510) 820-9391

PROJECT NAME Emeryville Properties NO.

ADDRESS Emeryville, CA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GASOLINE (EPA 5030/8015)	TPH-GASOLINE/BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NUETRALS, ACIDS (EPA 625/8270)	OIL & GREASE (EPA 5520 E&F or B&F)	LUFT METALS (5) (EPA 6010+7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGNITABILITY	Total Extractable Full Range				
MW-1	11/6	12:20	Water	5						X								✓	58290			

VOAS | O&G | METALS | OTHER | 1 L AMBERS

PRESERVATIVE ✓ ✓ ✓

ICE? ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
APPROPRIATE CONTAINERS ✓

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Robert E. Kitay 13:48	Heidi Ricca 1348			Standard
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	T.A.T.
Robert E. Kitay 13:49	Heidi RiccA 11-6-95			
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE	Company- MC Campbell	Company-	Company-	

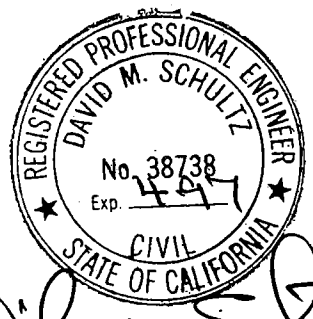
aqua science engineers inc.

April 8, 1997

GROUNDWATER MONITORING REPORT
MARCH 21, 1997 SAMPLING

at

Emeryville Properties
1400 Park Avenue
Emeryville, California



Prepared by:
AQUA SCIENCE ENGINEERS, INC.
2411 Old Crow Canyon Road, #4
San Ramon, CA 94583
(510) 820-9391

1.0 INTRODUCTION

This report details the groundwater sampling event for the subject site, as required by the Alameda County Health Care Services Agency (ACHCSA) and the Regional Water Quality Control Board (RWQCB). Aqua Science Engineers, Inc. (ASE) has prepared this report on behalf of Emeryville Properties.

2.0 SITE BACKGROUND

2.1 Prior Consultants' Work

In 1992, a below grade concrete vault was removed outside the north side of the building. This vault was used for secondary containment for six former vats used for chrome-plating activities. A Final Closure Report issued by Excel Trans in 1992 indicated that the soil surrounding the vault contained elevated concentrations of chromium and approximately 40 tons of soil were removed from the site. In October 1992, Excel Trans drilled four soil borings in an attempt to delineate the chromium contamination in soil downgradient of the former vault. Total chromium concentrations in these borings ranged from 2.2 parts per million (ppm) to 88 ppm, far below the action level in the US EPA Region IX Preliminary Remediation Goals for industrial soil.

In December 1994, Alton Geoscience conducted assessment activities at the site related to the former vault which included the drilling of six (6) soil borings and the installation of monitoring wells MW-1, MW-2 and MW-3. Soil and groundwater samples from these borings and wells were analyzed for total and Hexavalent chromium, total lead, and halogenated volatile organic compounds (HVOCs).

The results of the Alton investigation indicated that there were low concentrations of total chromium (ranging from 19 ppm to 91 ppm) and Hexavalent chromium ranging from non-detectable (N.D.) to 27 ppm in the soil. Total chromium ranging from N.D. to 0.069 ppm, and Hexavalent chromium concentrations ranging from N.D. to 0.025 ppm were detected in water samples collected from monitoring wells MW-1, MW-2 and MW-3 at the site. Low concentrations of total lead were detected in all of the soil samples, but at concentrations below regulatory thresholds. No total lead was detected in the water samples collected from monitoring wells MW-1, MW-2 and MW-3 at the site. HVOC concentrations were identified in two soil samples collected on site. However, a source for HVOC compounds was not identified near

the former tank vault. HVOCs were detected in groundwater samples from all three monitoring wells. Since MW-3 was positioned upgradient of the former vault, and HVOCs were identified in the water sample from MW-3, an offsite source was considered. Alton performed a review of HVOC data for both the Del Monte plant and the ECI facility, each of which are located near and either upgradient or crossgradient of the subject site. Data shows the HVOC contamination in groundwater from these two site appear to be affecting at least a portion of the Emeryville Properties property. For further information regarding the afore-mentioned remedial and assessment activities, see the Alton Geoscience report dated May 17, 1995. A "No Further Action" letter was issued by the ACHCSA on December 13, 1995 related to the former vault closure activities mentioned above.

2.2 Aqua Science Engineers, Inc. (ASE) Work

On July 21, 1995, ASE excavated 112.36 tons of petroleum-hydrocarbon contaminated soil from below a truck dock that was fitted with a honing machine used by a previous building tenant. Analytical results of sidewall excavation soil samples collected 6-feet below ground surface (bgs) indicated the presence of hydrocarbons from C8 to C44 as high as 870 ppm and oil and grease concentrations as high as 1,600 ppm. Bottom of excavation soil samples collected from 10-feet bgs were non-detectable for hydrocarbons from C8 to C44 with only 20 ppm oil and grease. A grab groundwater sample collected from within the pit contained 7,000 parts per billion (ppb) total petroleum hydrocarbons and 11,000 ppb total oil and grease. Soil and water samples were also analyzed for HVOCs by EPA Method 8010. None of the soil samples contained HVOC concentrations above reporting limits. However, the grab groundwater sample contained tetrachloroethene (PCE) at 19 ppb, trichloroethene (TCE) at 100 ppb, vinyl chloride at 11 ppb, 1,2- dichlorobenzene at 1 ppb, cis 1,2-dichloroethene at 49 ppb, and trans 1,2-dichloroethene at 3 ppb. All these HVOCs are known to exist in the area's groundwater from contamination caused by others.

Further overexcavation of contaminated soil was not possible due to the position of the excavation in proximity to the building walls and the adjacent Horton Street and sidewalk.

The excavation was backfilled with clean, imported soil, and the contaminated soil was transported to and disposed of at Forward, Inc., a non-hazardous landfill in Manteca, California, on July 13, 1995. For

further information regarding these activities, please see the ASE report dated August 3, 1995.

On October 23, 1995, ASE removed three (3) underground fuel storage tanks (USTs) from the site (Figure 2). The existing monitoring wells at the site are were utilized for sampling related to the potential release from these former USTs. See ASE report dated January 12, 1996 for details regarding the UST removal activities.

On December 6, 1996, ASE conducted assessment activities at the site related to the former honing pit which included the drilling of one (1) soil boring and the installation of monitoring well MW-4. Soil samples were collected from this boring and groundwater samples were collected from this monitoring well and previously installed monitoring wells. See ASE report dated March 7, 1997 for details regarding the assessment activities.

3.0 GROUNDWATER GRADIENT AND DIRECTION

ASE surveyed the top of casing elevation of each well relative to a site datum on December 23, 1996. An assumed site datum elevation of 10-feet above mean sea level (msl) was interpolated from the USGS Oakland West, California 7.5 Minute Quadrangle (1980). The top of casing elevation of monitoring well MW-2 was set at 10-feet, and the top of casing elevations of monitoring wells MW-1, MW-3 and MW-4 were surveyed relative to monitoring well MW-2. The depth to groundwater was measured in each well prior to sampling on March 21, 1997 with an electric water level sounder. Depth to groundwater measurements are presented in Table One, and groundwater elevation contours are plotted on Figure 2. Groundwater appears to flow to the west beneath the site at a gradient of 0.0056-feet/foot.

4.0 GROUND WATER SAMPLE COLLECTION AND CHEMICAL ANALYSIS

On March 21, 1997, ASE environmental specialist Scott Ferriman arrived on-site. After measuring and recording the depths to groundwater in monitoring wells MW-1, MW-2, MW-3 and MW-4, ASE purged four well casing volumes of groundwater from monitoring well MW-1 using a pre-cleaned dedicated polyethylene bailer. Monitoring wells MW-2, MW-3 and MW-4 were not sampled during this sampling event; they will be sampled annually in the first quarter, beginning in 1998. No

free-floating hydrocarbons or sheen was encountered in any of the wells. The pH, temperature and conductivity of the purge water was monitored during evacuation, and samples were not collected until these parameters stabilized. Groundwater samples were collected from MW-1 using a dedicated polyethylene bailer. Groundwater samples were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials and 1-liter amber glass bottles. All samples were preserved with hydrochloric acid, labeled, placed in protective foam sleeves and placed on ice for transport to Chromalab of Pleasanton, California (ELAP# 1094) under chain-of-custody. The analytical report and chain-of-custody are included in Appendix A. Well Sampling Field Logs are attached in Appendix B. Well purge water was placed in a 55-gallon steel DOT 17H drum and stored on-site pending analytical results.

The groundwater samples collected from monitoring well MW-1 were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method 5030/8015M, total petroleum hydrocarbons as diesel (TPH-D) and motor oil (TPH-MO) by EPA Method 3510/8015M, benzene, toluene, ethylbenzene and xylenes (BTEX) and MTBE by EPA Method 8020. These results and previous results are tabulated below in Tables Two and Three.

5.0 CONCLUSIONS

No TPH-G, TPH-D, TPH-MO, BTEX and MTBE were detected in groundwater samples collected from monitoring well MW-1 this quarter.

6.0 RECOMMENDATIONS

ASE recommends the following:

* Since no concentrations of TPH-G, TPH-D, TPH-MO, BTEX and MTBE were detected above reporting limits in groundwater from monitoring well MW-1, ASE recommends no further sampling of groundwater from monitoring well MW-1. Monitoring well MW-1 will no longer be sampled as a part of quarterly or annual monitoring activities.

* Annual groundwater sampling of monitoring wells MW-2, MW-3 and MW-4 will be conducted in the first quarter of each year, beginning in 1998. These samples will be analyzed for volatile

organic compounds by EPA Method 8240 and total chromium by EPA Method 6010.

7.0 REPORT LIMITATIONS

The results of this assessment represent conditions at the time of the groundwater sampling for the specific parameters analyzed by the laboratory. It does not fully characterize the site for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of independent CAL-EPA certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

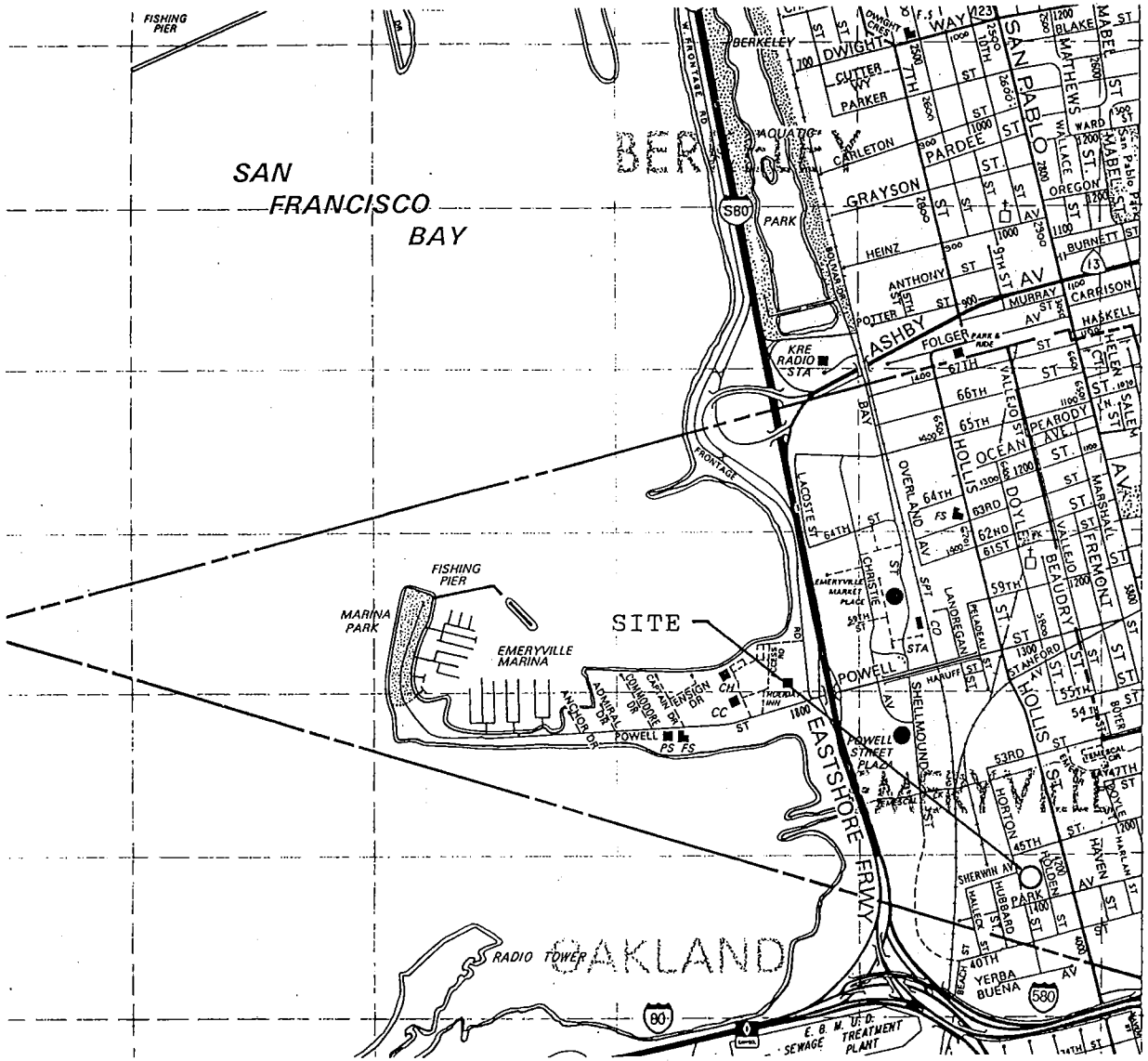
Aqua Science Engineers appreciates the opportunity to continue providing environmental services for this project. Should you have any questions or comments, please feel free to call us at (510) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Scott Ferriman
Environmental Specialist

FIGURES

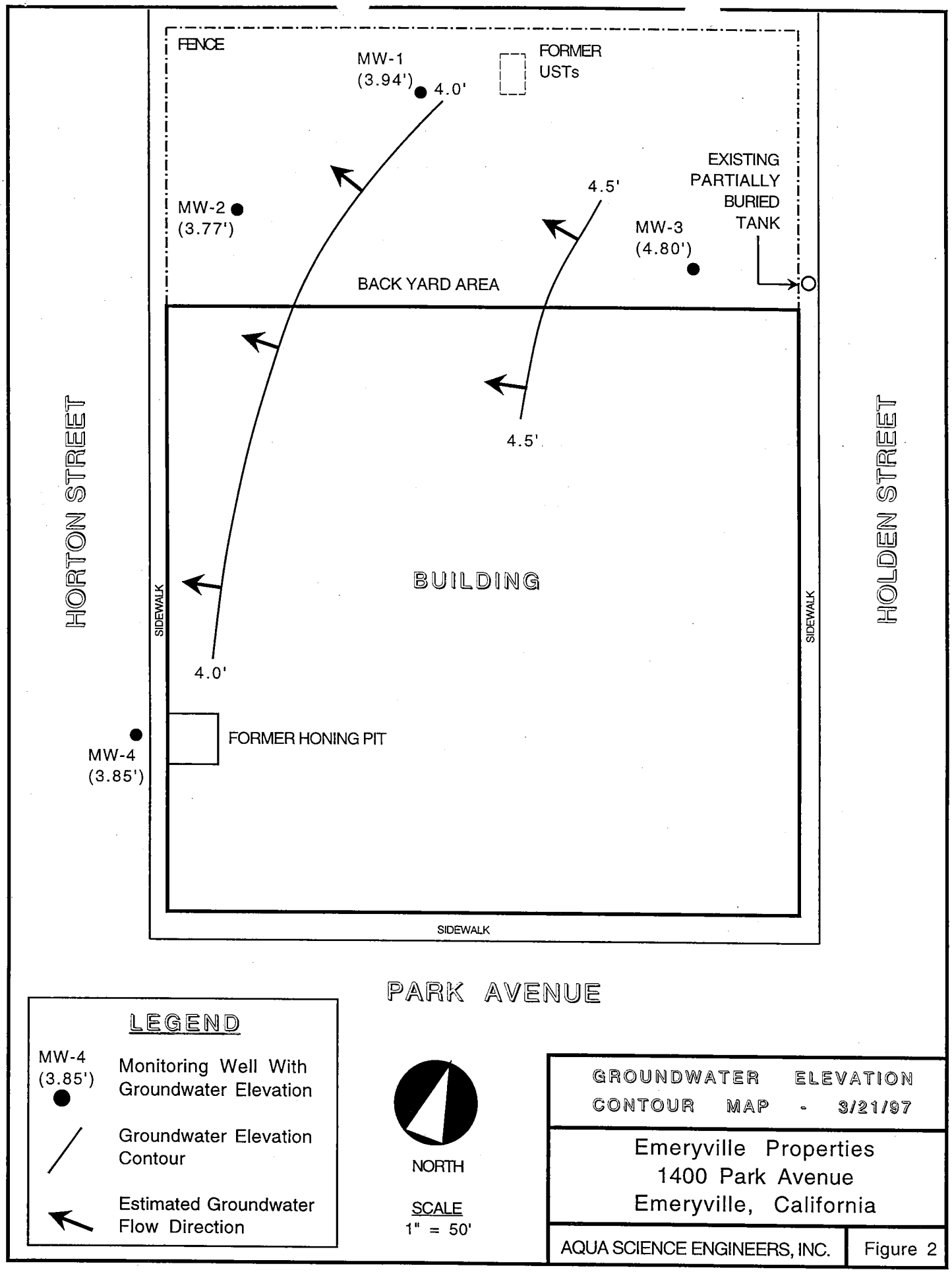


NORTH

LOCATION MAP

Emeryville Properties Facility
1400 Park Avenue
Emeryville, California

Aqua Science Engineers | Figure 1


FENCE
MW-1
(3.94')
4.0'
FORMER
USTs
EXISTING
PARTIALLY
BURIED
TANK
MW-2
(3.77')
4.5'
MW-3
(4.80')
BACK YARD AREA
4.5'
HORTON STREET
HOLDEN STREET
BUILDING
SIDEWALK
SIDEWALK
4.0'
FORMER HONING PIT
MW-4
(3.85')
SIDEWALK
PARK AVENUE
LEGEND
MW-4
(3.85')
Monitoring Well With
Groundwater Elevation
Groundwater Elevation
Contour
Estimated Groundwater
Flow Direction
NORTH
SCALE
1" = 50'
GROUNDWATER ELEVATION
CONTOUR MAP - 3/21/97
Emeryville Properties
1400 Park Avenue
Emeryville, California
AQUA SCIENCE ENGINEERS, INC.
Figure 2

TABLES

TABLE ONE

Summary of Groundwater Well Survey Data

Well I.D.	Date of Measurement	Top of Casing Elevation (relative to project datum)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-1	12-13-96	12.67	7.85	4.82
	03-21-97		8.73	3.94
MW-2	12-13-96	10.00	5.39	4.61
	03-21-97		6.23	3.77
MW-3	12-13-96	13.61	7.69	5.92
	03-21-97		8.81	4.80
MW-4	12-13-96	8.17	3.42	4.75
	03-21-97		4.32	3.85

TABLE TWO
Summary of Chemical Analysis of **WATER** Samples
TPH-G, TPH-D, TPH-MO, BTEX and MTBE
(All Results are in **parts per billion**)

Sample I.D.	TPH-G	TPH-D	TPH-MO	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
MW-1								
12/13/96	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<5
03/21/97	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	<5
MW-2								
12/13/96	NA	NA	NA	<2	<2	<2	<2	NA
03/21/97	Not sampled this quarter							
MW-3								
12/13/96	NA	NA	NA	<2	<2	<2	<2	NA
03/21/97	Not sampled this quarter							
MW-4								
12/13/96	<50	140*	<50	<2	<2	<2	<2	NA
03/21/97	Not sampled this quarter							
DTSC MCL	NE	NE	NE	1	100	680	1,750	NE

Notes:
* = Chromatogram pattern does not resemble diesel fuel standard.
DTSC MCL = California Department of Toxic Substances Control maximum contaminant level for drinking water.
NA = Not analyzed
NE = Not established

TABLE THREE

Summary of Chemical Analysis of **WATER** Samples
Metals, Volatile Organic Compounds and Semi-Volatile Organic Compounds
(All Results are in **parts per billion**)

Sample I.D.	Total Chromium	Lead	cis-1,2 DCE	PCE	TCE	VC	Other VOC's	SVOC's
MW-1								
12/13/96	NA	NA	NA	NA	NA	NA	NA	NA
03/21/97	NA	NA	NA	NA	NA	NA	NA	NA
MW-2								
12/13/96	57	<5	<2	<2	3.4	<5	< 2-20	NA
03/21/97	Not sampled this quarter							
MW-3								
12/13/96	<5	<5	14	4.7	13	<5	< 2-20	NA
03/21/97	Not sampled this quarter							
MW-4								
12/13/96	300	<5	31	18	110	8.2	< 2-20	< 2-5
03/21/97	Not sampled this quarter							
DTSC MCL	50	50	6	5	5	0.5	varies	varies

Notes:
DTSC MCL = California Department of Toxic Substances Control maximum contaminant level for drinking water.
NA = Not analyzed
cis 1,2-DCE = cis-1,2-dichloroethene
PCE = tetrachloroethene
TCE = trichloroethene
VC = vinyl chloride

APPENDIX A

California EPA Certified Laboratory
Report of Groundwater Samples
and
Chain of Custody Record

CHROMALAB, INC.

Environmental Services (SDB)

March 28, 1997 *Submission #:* 9703310

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: EMERYVILLE PROPERTIES *Project#:* 2908
Received: March 21, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: WATER *Extracted:* March 27, 1997
Sampled: March 21, 1997 *Run#:* 5976 *Analyzed:* March 28, 1997

Spl#	CLIENT SPL ID	Diesel (ug/L)	Motor Oil (ug/L)
122342	MW-1	N.D.	N.D.

Note: Surrogate recovery was outside QA/QC limits. See Surrogate Summary page.

Reporting Limits	50	500
Blank Result	N.D.	N.D.
Blank Spike Result (%)	90.0	--

Bruce Havlik for
Chemist

Alex Tam
Semivolatiles Supervisor

510-837-4853 MV 03/28

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

S010 0:0C0405 YT 17:21

CHROMALAB, INC.

Environmental Services (SDB)

March 28, 1997 *Submission #:* 9703310

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: EMERYVILLE PROPERTIES *Project#:* 2908
Received: March 21, 1997

re: **Surrogate** report for 1 sample for TEPH analysis.
Method: EPA 8015M
Lab Run#: 5976
Matrix: WATER

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
122342-1	MW-1	O-TERPHENYL	143	60-130
122342-1	MW-1	O-TERPHENYL	143	60-130

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
123317-1	*Reagent blank (MDB)*	O-TERPHENYL	122	60-130
123318-1	*Spiked blank (BSP)*	O-TERPHENYL	125	60-130
123319-1	*Spiked blank duplicate (BSD)*	O-TERPHENYL	127	60-130

S010
QCSURR1229 YT 28-Mar-97 17:18:3

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 27, 1997 *Submission #:* 9703310

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: EMERYVILLE PROPERTIES *Project#:* 2908
Received: March 21, 1997

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-1
Spl#: 122342 *Matrix:* WATER
Sampled: March 21, 1997 *Run#:* 5955 *Analyzed:* March 25, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
MTBE	N.D.	5.0	N.D.	100	1
BENZENE	N.D.	0.50	N.D.	102	1
TOLUENE	N.D.	0.50	N.D.	101	1
ETHYL BENZENE	N.D.	0.50	N.D.	100	1
XYLENES	N.D.	0.50	N.D.	103	1
GASOLINE	N.D.	50	N.D.	103	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-837-4853

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

310/133342

32673

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Road, #4,
San Ramon, CA 94583
(510) 820-9391 - FAX (510) 837-4853

Chain of Custody

DATE 3-21-97 PAGE 1 OF 1

SAMPLERS (SIGNATURE) (PHONE NO.)
Scott T. 510-820-9391

PROJECT NAME Emeryville Properties NO. 2908
ADDRESS 1400 Park Ave, Emeryville CA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

5-Day

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH- GASOLINE (EPA 5030/8015)	TPH- GASOLINE/BTEX/MTBE (EPA 5030/8015-8020)	TPH- DIESEL/Motor Oil (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NUETRALS, ACIDS (EPA 625/8270)	OIL & GREASE (EPA 5520 E&F or B&F)	LUFT METALS (5) (EPA 6010+7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGNITABILITY
MW-1	3 21 97	12:55	wat	5		X	X										

SUBM #: 9703310 REP: MV
CLIENT: ASE
DUE: 03/28/97
REF #:32673

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Scott T. 14:25			C. Andrette 15:25	5 Day
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
Scott T. Fenning 3.21.97			C. Andrette 3/21/97	
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE, Inc.	Company-	Company-	Chromalab	

APPENDIX B

Well Sampling Field Logs

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Emeryville Properties, 1400 Park Ave, Emeryville, CA
Job #: 2908 Date of sampling: 3-21-97
Well Name: MW-1 Sampled by: SF
Total depth of well (feet): 22.91 Well diameter (inches): 2"
Depth to water before sampling (feet): 8.73
Thickness of floating product if any: none
Depth of well casing in water (feet): 14.18
Number of gallons per well casing volume (gallons): 2.4
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 10
Equipment used to purge the well: Dedicated Poly Bailer
Time Evacuation Began: 12:30 Time Evacuation Finished: 12:50
Approximate volume of groundwater purged: 10
Did the well go dry?: No After how many gallons: —
Time samples were collected: 12:55
Depth to water at time of sampling: 8.77
Percent recovery at time of sampling: 99%
Samples collected with: Dedicated Poly Bailer
Sample color: Clear Odor: none
Description of sediment in sample: none

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	69.5	9.95	499
2	69.7	9.87	518
3	69.6	9.81	526
4	69.6	9.82	528

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-1	3	40 ml VOAs	HCl	Yes	TPHg/BTEX/MTBE
↓	2	1 L Amb	↓	↓	TPHD/MO

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Emeryville Properties, 1400 Park Ave, Emeryville, CA
Job #: 2908 Date of sampling: 3-21-97
Well Name: MW-2 Sampled by: SF
Total depth of well (feet): 22.87 Well diameter (inches): 2"
Depth to water before sampling (feet): 6.23
Thickness of floating product if any: none
Depth of well casing in water (feet): _____
Number of gallons per well casing volume (gallons): _____
Number of well casing volumes to be removed: _____
Req'd volume of groundwater to be purged before sampling (gallons): _____
Equipment used to purge the well: _____
Time Evacuation Began: _____ Time Evacuation Finished: _____
Approximate volume of groundwater purged: _____
Did the well go dry?: _____ After how many gallons: _____
Time samples were collected: _____
Depth to water at time of sampling: _____
Percent recovery at time of sampling: _____
Samples collected with: _____
Sample color: _____ Odor: _____
Description of sediment in sample: _____

CHEMICAL DATA

Sampled 1st Quarters Only, Beginning in 1998.

Volume Purged	Temp	pH	Conductivity

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis

2411 Old Crow Canyon Road, Suite 4, San Ramon, CA 94583 • 510-820-9391 • Fax 510-837-4853

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Emeryville Properties, 1400 Park Ave, Emeryville, CA
Job #: 2908 Date of sampling: 3-21-97
Well Name: MW-3 Sampled by: SF
Total depth of well (feet): 22.92 Well diameter (inches): 2"
Depth to water before sampling (feet): 8.81
Thickness of floating product if any: none
Depth of well casing in water (feet): _____
Number of gallons per well casing volume (gallons): _____
Number of well casing volumes to be removed: _____
Req'd volume of groundwater to be purged before sampling (gallons): _____
Equipment used to purge the well: _____
Time Evacuation Began: _____ Time Evacuation Finished: _____
Approximate volume of groundwater purged: _____
Did the well go dry?: _____ After how many gallons: _____
Time samples were collected: _____
Depth to water at time of sampling: _____
Percent recovery at time of sampling: _____
Samples collected with: _____
Sample color: _____ Odor: _____
Description of sediment in sample: _____

CHEMICAL DATA

Sampled 1st Quarter Only, Beginning in 1998

Volume Purged	Temp	pH	Conductivity

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis

2411 Old Crow Canyon Road, Suite 4, San Ramon, CA 94583 • 510-820-9391 • Fax 510-837-4853

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Emeryville Properties, 1400 Park Ave, Emeryville, CA
Job #: 2908 Date of sampling: 3-21-97
Well Name: MW-4 Sampled by: SF
Total depth of well (feet): 19.55 Well diameter (inches): 2"
Depth to water before sampling (feet): 4.32
Thickness of floating product if any: none
Depth of well casing in water (feet):
Number of gallons per well casing volume (gallons):
Number of well casing volumes to be removed:
Req'd volume of groundwater to be purged before sampling (gallons):
Equipment used to purge the well:
Time Evacuation Began: Time Evacuation Finished:
Approximate volume of groundwater purged:
Did the well go dry?: After how many gallons:
Time samples were collected:
Depth to water at time of sampling:
Percent recovery at time of sampling:
Samples collected with:
Sample color: Odor:
Description of sediment in sample:

CHEMICAL DATA

Sampled 1st Quarter Only, beginning in 1998.

Volume Purged	Temp	pH	Conductivity

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis

2411 Old Crow Canyon Road, Suite 4, San Ramon, CA 94583 • 510-820-9391 • Fax 510-837-4853

Environmental, Health & Regulatory Services
101 Prospect Avenue NW
Cleveland, Ohio 44115-1075
Facsimile: (216) 566-2730

January 8, 2015

Ms. Juanita Bacey
Project Manager
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, California 94710-2721

Subject: Data Summary Report for Groundwater Monitoring Activities for the Period from July 1, 2014 through December 31, 2014, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California, DTSC Docket No. HSA-O&MEA 11/12-096

Dear Ms. Bacey:

The Sherwin-Williams Company is pleased to present the enclosed data summary report for groundwater monitoring activities conducted during the period from July 1, 2014 through December 31, 2014 ("the reporting period"), prepared by ARCADIS U.S., Inc. (ARCADIS) for the Sherwin-Williams Company facility in Emeryville, California ("the Site").

This data summary report is submitted pursuant to the requirements of the Operations and Maintenance Agreement (O&M Agreement) between the Sherwin-Williams Company and the Department of Toxic Substances Control (DTSC) executed on January 23, 2013. The O&M Plan considered that reporting would be conducted on an annual basis after the July 2014 Data Summary Report submission. However, per DTSC's request in communication dated July 1, 2014, this additional Data Summary Report summarizes third and fourth quarter 2014 groundwater monitoring results to continue to evaluate groundwater arsenic trends at the Site. This report presents data collected as part of the established groundwater monitoring program, in accordance with the Operations and Maintenance Plan (O&M Plan), prepared by CDM Smith, dated December 11, 2012 and approved by DTSC in a letter dated December 17, 2012.

The O&M Plan established the groundwater monitoring program for the Site. During the reporting period, groundwater self-monitoring activities were performed by ARCADIS in accordance with the O&M Plan and subsequent DTSC direction. This summary report presents groundwater monitoring data collected during the reporting period.

In accordance with the O&M Plan, and as discussed in the Data Summary Report, groundwater monitoring wells CDM-110 and CDM-111 transitioned from semiannual sampling to annual sampling because criteria were met for reducing the monitoring schedule.

Groundwater samples were collected from 20 monitoring wells during the October 2014 semiannual monitoring event for analysis of dissolved arsenic, and from four wells for analysis of volatile organic compounds, as part of the groundwater sampling event outlined in the O&M Plan. Additionally, contingency quarterly monitoring was conducted at monitoring location CDM-108 in July 2014 in accordance with the Contingency Monitoring letter submitted on July 29, 2014 to reevaluate the statistically increasing groundwater arsenic concentration trend. Data from the current reporting period and historical groundwater monitoring data are presented in the enclosed report.

Although the dissolved arsenic concentration was lower than the previous quarter at well CDM-108, a statistically increasing trend was still observed, and LF-41 and RP-2 had arsenic detections above historical maximums in October 2014, groundwater elevation and sampling data collected post remedy implementation from April 2012 through October 2014 at all other groundwater monitoring locations demonstrate that the remedy at the Site is consistent with the remedy effectiveness criteria, and that contingency actions (other than presented in the Contingency Monitoring letter) are currently not necessary. Site construction and/or operations have not impacted the effectiveness of the remedy components.

If you have any questions, please call Lucas Goldstein of ARCADIS at 510-652-4500 or me at 216-566-1768.

Sincerely,



Larry R. Mencin
Sr. Environmental Project Manager

Enclosure

DISTRIBUTION LIST:

Hard Copy including CD:

Larry Mencin
The Sherwin-Williams Company
101 Prospect Avenue, N.W.
Cleveland, Ohio 44115-1075

Lucas Goldstein
ARCADIS U.S., Inc.
2000 Powell Street, 7th Floor
Emeryville, California 94608

CD Only:

Pawan K. Sharma
CDM Smith
One Walnut Creek Center
100 Pringle Avenue, Suite 300
Walnut Creek, California 94596

Vera Nelson
Erler & Kalinowski, Inc.
1870 Ogden Drive
Burlingame, California 94010

John Minardo
Novartis Vaccines & Diagnostics, Inc.
One Health Plaza – Building 310
East Hanover, New Jersey 07936

Mohammad R. Bazargani, P.E.
SLR International Corporation
110-11th Street, 2nd Floor
Oakland, California 94607

ARCADIS
Infrastructure · Water · Environment · Buildings

ARCADIS U.S., Inc.
2000 Powell Street
Suite 700
Emeryville
California 94608
Tel 510 652 4500
Fax 510 652 4906
www.arcadis-us.com

ENVIRONMENT

Larry R. Mencin
The Sherwin-Williams Company
101 Prospect Avenue, N.W.
Cleveland, Ohio 44115-1075

Subject:
Data Summary Report for Groundwater Monitoring Activities for the Period from July 1, 2014 through December 31, 2014, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California, DTSC Docket No. HSA-O&MEA 11/12-096

Date:
January 8, 2015

Contact:
Lucas Goldstein

Phone:
510.596.9535

Email:
Lucas.Goldstein@arcadis-us.com

Our ref:
EM002616.0014

Dear Mr. Mencin:

On behalf of The Sherwin-Williams Company, ARCADIS U.S., Inc. (ARCADIS) has prepared this report summarizing the groundwater monitoring data collected by ARCADIS at 1450 Sherwin Avenue in Emeryville, California ("the Site"; Figure 1). This report presents data collected as part of the established groundwater monitoring program, in accordance with the Operations and Maintenance Plan (O&M Plan), dated December 11, 2012 (CDM Smith 2012), and under the oversight of the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). The data were collected between July 1, 2014 and December 31, 2014 ("the reporting period"). Site construction and/or operations have not impacted the effectiveness of the remedy components.

The O&M Plan establishes the groundwater monitoring program for the Site. The O&M Plan was approved by DTSC in a letter dated December 17, 2012 (DTSC 2012).

In agreement with DTSC's letter dated August 22, 2006 (DTSC 2006), this report includes a summary of analytical results from groundwater samples collected during the October 2014 monitoring event conducted to support the South Bayfront Project Area (SBPA), located directly west of the Site (Figure 1). The SBPA site is under a separate agreement between the City of Emeryville and DTSC to conduct its own post remedy implementation groundwater monitoring; monitoring at the SBPA site is conducted by others. These SBPA results are presented in this report per agreement with DTSC primarily as additional information and are not specifically evaluated in conjunction with the results of groundwater monitoring conducted at the Site during the reporting period.

Although the O&M Plan considered that reporting would be conducted on an annual basis after submission of the July 2014 Data Summary Report, per DTSC's request in its comments to the July 2014 Data Summary Report in email dated July 1, 2014, this Data Summary Report summarizes third and fourth quarter 2014 groundwater monitoring results to continue to evaluate groundwater arsenic trends at the Site.

Summary

Groundwater monitoring data were evaluated to determine the effectiveness of the remedy and to determine if contingency actions are needed to achieve cleanup goals. Remedy effectiveness criteria for the Site are provided in Table C-2 of the O&M Plan and in Table 7 of this report[1]. The groundwater monitoring data collected post remedy implementation from April 2012 through October 2014 demonstrated that the remedy is meeting the established effectiveness criteria for the Site, with the exception of an increasing concentration trend that was determined for arsenic in groundwater from well CDM-108. This well first showed an increasing concentration following the October 2013 monitoring event (CDM Smith 2014a). Monitoring well CDM-108 is located along the western property line of the Site, immediately west of the middle slurry wall breach (Figure 1).

As specified in the O&M Plan, if a statistically increasing contaminant of concern (COC) concentration trend is observed, the frequency of monitoring for that well will increase to monthly for 3 months, and the Mann-Kendall trend will be reevaluated using the concentrations from the most recent four monitoring events. Monthly monitoring was initiated at well CDM-108 in early December 2013 and continued through February 2014. Concentrations of arsenic in these three monthly groundwater samples and subsequent sample results from this reporting period continue to show this trend for CDM-108. Proposed contingency action for CDM-108 was presented within the Proposed Contingency Action for Monitoring Well CDM-108 letter submitted to DTSC on July 29, 2014 (CDM Smith 2014c). The proposed contingency action includes quarterly groundwater monitoring for dissolved arsenic at CDM-108 from

[1] Effectiveness criteria for CDM-101 and CDM-102: COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing for 4 years after remedy implementation, and arsenic is less than 5 milligrams per liter (mg/L) 4 years after remedy implementation.
Effectiveness criteria for CDM-103, CDM-104, CDM-107, CDM-108, CDM-109, CDM-112, RP-1, RP-2, RP-4, RP-5, LF-18, LF-24, LF-25, LF-36, and LF-41: COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing.

July 2014 through April 2016, and reevaluation of the trend following the July 2015 monitoring event. Contingency monitoring on a quarterly frequency at CDM-108 in accordance with the aforementioned letter began in July 2014.

As presented previously to DTSC, arsenic concentrations reported from well CDM-108 since its installation in April 2012 are consistent with pre remedy implementation observations from a former nearby well (LF-21, abandoned in 2007; see Figure 1), and the increasing arsenic trend from well CDM-108 may not indicate spreading of arsenic in groundwater in the vicinity of CDM-108. The range of arsenic concentrations from CDM-108 (0.032 milligram per liter [mg/L] to 0.23 mg/L) is similar to the range of concentrations observed between 2005 and 2007 from LF-21 (0.011 mg/L to 0.15 mg/L). These concentrations of arsenic in groundwater in this portion of the site groundwater plume, coupled with arsenic present upgradient and downgradient from this area, are considered to be representative of an overall stable to decreasing groundwater plume.

Two monitoring wells (LF-41 and RP-2) had detections of arsenic in groundwater in October 2014 higher than their historically reported values prior to remedy implementation. Although arsenic concentrations in October 2014 were measured above historical maximum concentrations at LF-41 and RP-2, statistical trends post remedy implementation still indicate no trend and are below contingency criteria for implementing active groundwater extraction (Table C-3 of the O&M Plan [CDM Smith 2012]).

Groundwater elevation and sampling data collected post remedy implementation from April 2012 through October 2014 at all other groundwater monitoring locations demonstrate that the remedy at the Site is consistent with the remedy effectiveness criteria, and that contingency actions (other than presented in the Proposed Contingency Action for Monitoring Well CDM-108 letter [Contingency Monitoring letter; CDM Smith 2014c]) are currently not necessary. Site construction and/or operations have not impacted the effectiveness of the remedy components.

As part of the Data Summary Report for the previous period, ARCADIS requested that the monitoring schedule be modified from semiannually to annually for monitoring wells CDM-110 and CDM-111 based on results of the Mann-Kendall trend analyses post remedy implementation. The Data Summary Report for the previous period was approved in the letter from DTSC dated August 11, 2014. Wells CDM-110 and CDM-111 will be monitored as part of the next annual monitoring event to be conducted in April 2015.

Groundwater Monitoring Program

This report presents groundwater monitoring data collected during the July 1, 2014 to December 31, 2014 reporting period. During the reporting period, quarterly groundwater elevations were measured in July and October, a contingency quarterly monitoring event was conducted at monitoring location CDM-108 in July, and a semiannual groundwater quality sampling event was conducted in October.

Work during the reporting period was conducted in accordance with the O&M Plan (CDM Smith 2012), the Quality Assurance Project Plan (QAPP; LFR 2006), the Health and Safety Plan for the Site (ARCADIS 2012), the current Standard Operating Procedure for Groundwater Sample Collection (SOP; CDM Smith 2014b), and the Contingency Monitoring letter (CDM Smith 2014c).

Groundwater Elevation Measurements

ARCADIS conducted two separate quarterly water-level measurement events during the reporting period. Groundwater elevation data obtained during the reporting period are presented in Table 1. For reference, well construction details are also included in Table 1. Groundwater elevations and interpreted contour intervals for the two quarterly water-level measurement events are presented on Figures 2 and 3. Current and historical groundwater elevation data are provided in Table D-1 of Appendix D.

Groundwater elevations were measured on a quarterly basis from July to December 2014 as specified in the O&M Plan (CDM Smith 2012). In accordance with the O&M Plan, and because groundwater movement patterns have been consistent with the projected groundwater model design conditions, water-level measurement events were transitioned from monthly to quarterly starting with the July 2013 water-level measurement event. If groundwater flow conditions become inconsistent with projected design conditions, monthly collection events will be initiated, per the O&M Plan.

Supplemental to the schedule presented in the O&M Plan, ARCADIS measured groundwater elevations at additional monitoring wells during the monitoring events to further monitor water-level trends at the Site. Details for each event are provided below:

- On July 8, 2014 and October 27, 2014, depth-to-water measurements were collected at 35 monitoring wells and two piezometers. All wells required to be monitored in accordance with the O&M Plan were measured during the quarterly

water-level events. Supplemental to the monitoring schedule presented in the O&M Plan, the following wells were also gauged for depth to groundwater during the quarterly water-level events: upgradient wells LF-13, LF-27, and LF-29, and downgradient off-site well MD-5 (located on the SBPA site, directly west of the Site [Figure 1]).

- During the October 27, 2014 water-level monitoring event, the water-level sounders used to measure the depth to groundwater at the Site and the SBPA site were calibrated to each other. The water-level sounder calibration was conducted by field personnel teams for each site at well MD-5, located on the SBPA site, before the event began. Based on the results of the calibration, the other field personnel teams adjusted their depth-to-water measurements to match the ARCADIS depth-to-water measurements.

Groundwater Quality Sampling

ARCADIS performed groundwater quality sampling on July 8, 2014 (quarterly event) and October 27 through October 31, 2014 (semiannual event). In accordance with the Contingency Monitoring letter, ARCADIS performed groundwater quality sampling at CDM-108 on July 8, 2014.

In accordance with the O&M Plan, groundwater samples collected during the sampling events were analyzed for dissolved arsenic using United States Environmental Protection Agency (EPA) Method 6010B. Groundwater samples (CDM-101, CDM-102, CDM-107, and CDM-108) collected during the October 2014 semiannual monitoring event were also analyzed for volatile organic compounds (VOCs) using EPA Method 8260B. Analytical results are presented in Table 2 for VOCs and Table 3 for laboratory-filtered dissolved arsenic concentrations. Figure 4 presents the arsenic concentrations detected in groundwater samples collected from the monitoring wells sampled during the July and October 2014 events. Complete analytical results for the reporting period are presented in Appendix C. Field parameters collected during groundwater sampling (temperature, pH, and specific conductance, dissolved oxygen, oxidation-reduction potential, and turbidity) are presented in Table B-1 of Appendix B. Appendix D Tables D-2 through D-4 present current and historical analytical data collected at the Site.

Groundwater Sampling Methods

In accordance with the QAPP (LFR 2006) and the current SOP (CDM Smith 2014b) approved by DTSC (DTSC 2014a), monitoring wells were purged using a submersible

pump and sampled using HydraSleeves™ during the July and October 2014 monitoring events.

A minimum of three well-casing volumes of water was purged from each monitoring well before sampling. Field parameters were also recorded during purging. Wells were sampled once stabilization of temperature, pH, and specific conductance parameters was achieved and the initial well volume recovered to a minimum of 80% (or for a minimum of 2 hours and a maximum of 24 hours [LFR 2006]). All wells recovered to a minimum 80% of the initial well volume within 2 hours of purging.

The samples designated for chemical analysis were analyzed according to EPA method protocol by Curtis & Tompkins, Ltd., a state-certified analytical laboratory located in Berkeley, California. Appendix A includes a quality assurance/quality control (QA/QC) review of groundwater sampling and analytical results. Analytical laboratory reports and chain-of-custody forms for field and QA/QC samples are presented in Appendix F. Field data sheets and other QA/QC data are kept on file and available upon request.

Quality Assurance/Quality Control

In accordance with the QAPP (LFR 2006), QA/QC measures were implemented to maintain data quality and minimize the potential for field and laboratory cross contamination of samples. QA/QC procedures include collecting duplicate samples, HydraSleeve™ and submersible pump rinsate samples, trip blanks, and a water blank sample; controlling sampling order; and using single-use disposable sampling equipment (i.e., HydraSleeves™). Tables A-1 and A-2 provide user data typically included in laboratory reports and were prepared for the reporting period (Appendix A).

No QA/QC issues were encountered during the July 2014 quarterly event. The QA/QC issues encountered during the October 2014 semiannual event are summarized in Appendix A Tables A-1b and A-2b. Aside from the analytes mentioned in Appendix A Table A-2b, no other analytes were detected above laboratory reporting limits in any of the QA/QC samples, and the relative percent differences in concentrations of analytes between the primary and duplicate groundwater samples collected during the sampling events were below 30%.

Groundwater Results from the South Bayfront Project Area

The SBPA is the property located nearby to the west of the Site. The southern portion of the SBPA is bounded to the north by Temescal Creek and a portion may be

considered hydraulically related to the Site. Five groundwater monitoring wells are located within the southern portion of the SBPA; a figure from the Annual 2013 Groundwater Monitoring Report (Erler & Kalinowski, Inc. [EKI] 2013) showing the monitoring network associated with the SBPA site is provided in Appendix G. Selected analytical results from the most recent groundwater monitoring event conducted at the SBPA in October 2014 are summarized in the following table.

Well ID	Date Measured or Sampled	Groundwater Elevation (ft NAVD 88)	Arsenic (mg/L)	Total VOCs (mg/L)	TPHd (mg/L)
MD1 (SLR)	10/27/14	7.80	0.049	0.510[a]	2.5
MD2 (SLR)	10/27/14	4.52	0.019/ 0.02 [DUP]	ND/ ND [DUP]	2.7 Y/ 2.9 Y [DUP]
MD3 (SLR)	10/27/14	5.08	0.26	0.05[b]	1.6 Y
MD4 (SLR)	10/27/14	7.81	<0.005	ND	0.14 Y
MD5 (EKI)	10/27/13	5.48	0.00977/ 0.00971 [DUP]	ND/ ND [DUP]	--

Notes:

ft NAVD 88 = feet relative to North American Vertical Datum of 1988

mg/L = milligrams per liter

[a] Methyl tertiary-butyl ether detected at 0.0018 mg/L, benzene detected at 0.2 mg/L, toluene detected at 0.002 mg/L, chlorobenzene detected at 0.27 mg/L, isopropylbenzene detected at 0.017 mg/L, propylbenzene detected at 0.017 mg/L, and sec-butylbenzene detected at 0.0019 mg/L

[b] Acetone detected at 0.05 mg/L.

DUP = duplicate

ND = not detected; reporting limit not provided

< = less than reporting limit provided

-- = sample not analyzed for given compound

Y = sample exhibits chromatographic pattern that does not resemble standard

SLR = monitoring results were provided by SLR Consulting.

EKI = monitoring results were provided by Erler & Kalinowski, Inc.

Groundwater Remedy Effectiveness

Groundwater monitoring data were evaluated to determine the effectiveness of the remedy and to determine if contingency actions are needed to achieve cleanup goals; these data are presented in Table 7 and summarized below.

Although the dissolved arsenic concentration was lower than the previous quarter at well CDM-108, a statistically increasing trend was still observed. The groundwater

elevation and sampling data collected post remedy implementation at all other groundwater monitoring locations from April 2012 through October 2014 demonstrate that the remedy at the Site is consistent with the remedy effectiveness criteria. CDM-108 is currently being monitored quarterly in accordance with the Contingency Monitoring letter (CDM Smith 2014c) approved by DTSC in July 2014 (DTSC 2014b).

Groundwater Quality Effectiveness Criteria

Groundwater quality effectiveness criteria are summarized in Table C-2 of the O&M Plan (CDM Smith 2012). With the exception of trend analyses criteria identified for monitoring location CDM-108, all wells with effectiveness criteria indicated that COC concentrations are below cleanup goals and/or COC concentration trends are statistically stable to decreasing.

Table 7 provides a summary of evaluation criteria wells and their status with respect to the October 2014 semiannual event results. Effectiveness criteria wells with arsenic concentrations above their cleanup goals are CDM-101, CDM-108, CDM-109, RP-1, RP-2, LF-36, and LF-41. Monitoring wells CDM-101, CDM-109, RP-1, RP-2, LF-36, and LF-41 indicated no trend (i.e., statistically stable) for arsenic concentrations post remedy implementation. These findings indicate that stabilizing conditions exist at the majority of the Site.

Laboratory results for arsenic from samples collected during the reporting period from groundwater wells that existed prior to remedy implementation were within historical arsenic concentration ranges with the exception of the concentrations of arsenic at wells LF-41 and RP-2. Arsenic concentrations at monitoring wells that were installed during remedy implementation (CDM-101 through CDM-114) are less than historically reported concentrations for monitoring wells that previously existed within the vicinity of these wells.

As shown in Table 4, arsenic concentration trends calculated using the Mann-Kendall trend evaluation method (Gilbert 1987) performed for arsenic concentrations over the entire period at wells existing pre remedy implementation indicate statistically stable or decreasing arsenic concentration trends for all wells (that have sufficient data to establish a trend) except MW-3, RP-2, and RP-4. As shown in Table 5, the results of the Mann-Kendall trend analyses post remedy implementation indicate no trend for monitoring wells MW-3 and RP-2 and a decreasing concentration trend for monitoring well RP-4. These findings are indicative of stabilizing conditions at wells MW-3 and RP-4, as arsenic concentrations post remedy implementation are not detected above historical maximum concentrations. Although arsenic concentrations in October 2014

were measured above historical maximum concentrations at LF-41 and RP-2, statistical trends post remedy implementation still indicate no trend and are still below contingency criteria for implementing active groundwater extraction (Table C-3 of the O&M Plan [CDM Smith 2012]).

Results of the Mann-Kendall trend analysis continue to indicate a statistically increasing concentration trend for arsenic in groundwater at CDM-108, based on groundwater data collected post remedy implementation (Table 5). Concentrations of arsenic at monitoring well CDM-108 have ranged from 0.032 mg/L in April 2012 to 0.22 mg/L (0.23 mg/L in duplicate sample) in July 2014; the most recent detection was 0.17 mg/L in October 2014. Arsenic concentration trend plots for CDM-108 are provided in Appendix E. Concentrations of arsenic in groundwater at CDM-108 are well below contingency criteria for implementing active groundwater extraction (0.50 mg/L).

VOC concentrations detected in samples collected from evaluation criteria wells at or above their cleanup goals during the October 2014 semiannual monitoring event were 1,2-dichloroethane at CDM-101 (0.0008 mg/L) and CDM-102 (0.0011 mg/L); these concentrations are above the cleanup goal of 0.0005 mg/L. Consistent with historical observation, VOC concentrations attenuate across the Site and continue to be below the cleanup goals near the downgradient site boundary.

Groundwater Movement Effectiveness Criteria

Groundwater movement effectiveness criteria, as summarized in Table C-2 of the O&M Plan, are being met at the Site. Based on groundwater elevations collected at the Site from April 2012 through October 2014, groundwater movement patterns are consistent with the projected design conditions (CDM Smith 2012). Data collected post remedy implementation demonstrate the effectiveness of the slurry wall segments to divert groundwater, the effectiveness of the slurry wall breaches to facilitate groundwater movement without mounding, and the effectiveness of high-permeability backfill placement to control groundwater movement westward at the Rifkin/Sherwin-Williams property line between CDM-101/CDM-102 and PZ-101/CDM-104. In addition, depths to groundwater at monitored site wells have been consistently greater than 3 feet below ground surface post remedy implementation.

Arsenic mass flux was calculated within the excavated and backfilled area between CDM-101 and CDM-102 using groundwater monitoring data collected at the Site from April 2012 through October 2014 and is presented in Table 6. The net arsenic mass flux evaluation through the CDM-101/CDM-102 area indicates movement of arsenic

away from the former Rifkin property toward the Sherwin-Williams property and a total arsenic mass through the transect of approximately 7.40×10^{-4} pounds per year from April 2012 through October 2014. These results are indicative of remedy effectiveness based on maintaining a net mass flux from the former Rifkin property to the Sherwin-Williams property.

Closing

In accordance with the O&M Plan and subsequent DTSC direction, the following activities will be performed during the next reporting period (January 2015 through April 2015): quarterly groundwater elevation collections are scheduled to be performed in January 2015, and annual groundwater sampling is scheduled to be performed in April 2015. Groundwater monitoring for monitoring well CDM-108 will continue on a quarterly basis and is scheduled to be performed in January and April 2015 within the next reporting period. The next data summary report, for the first half of 2015, will be submitted on July 31, 2015.

If you have any questions or comments regarding the contents of this report, please call Larry Mencin of Sherwin-Williams at 216.566.1768 or Lucas Goldstein of ARCADIS at 510.596.9535.

Sincerely,

ARCADIS U.S., Inc.

Lucas Goldstein, P.G., P.E.
Principal Engineer
(PG-CA, #7035; PE-CA #C72455)

REGISTERED PROFESSIONAL ENGINEER
LUCAS GOLDSTEIN
C 72455
EXP 6/30/16
CIVIL
STATE OF CALIFORNIA

PROFESSIONAL GEOLOGIST
LUCAS GOLDSTEIN
No. 7035
STATE OF CALIFORNIA
Exp. September 30, 2016

Erica Whiting
Project Geologist

References

ARCADIS U.S., Inc. (ARCADIS). 2012. Site Specific Health and Safety Plan for the Sherwin-Williams Site located at 1450 Sherwin Avenue, Emeryville, California. November 19.

California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). 2006. Letter providing approval of the June 28, 2006 Groundwater Monitoring Plan Assessment. August 22.

———. 2012. Letter providing approval of the December 11, 2012 Operations and Maintenance Plan. December 17.

———. 2013. Operations and Maintenance Agreement. Docket No. HAS-O&MEA 11/12-096. January 23.

———. 2014a. Email to Pawan K. Sharma providing approval of the CDM Smith submittal titled Standard Operating Procedure for Groundwater Sample Collection, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California, dated April 21, 2014. April 21.

———. 2014b. Letter providing approval of the July 29, 2014 proposed contingency action for monitoring well CDM-108. July 30.

CDM. 2011. Remedial Design Implementation Plan, Sherwin-Williams Company, Emeryville, California. June 29.

CDM Smith. 2012. Operations and Maintenance Plan, Sherwin-Williams Company, Emeryville, California. December 11.

———. 2014a. Letter titled Monitoring Well CDM-108. March 31.

———. 2014b. Standard Operating Procedure for Groundwater Sample Collection, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. April 21.

———. 2014c. Proposed Contingency Action for Monitoring Well CDM-108, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. July 29.

Erler & Kalinowski, Inc. [EKI]. 2013. Annual 2013 Groundwater Monitoring Report, Bay Street Project Area, Emeryville, California. December 12.

Gilbert, Richard. 1987. *Statistical Methods for Environmental Pollution Monitoring.* Von Nostrand Reinhold. New York.

LFR Inc. (LFR). 2006. Quality Assurance Project Plan, Sherwin-Williams Facility, 1450 Sherwin Avenue, Emeryville, California. July 13.

Attachments

Table 1	Well Construction Details and Groundwater Elevation Data, Third and Fourth Quarters 2014
Table 2	Volatile Organic Compounds (EPA 8260) in Groundwater Monitoring Wells, Fourth Quarter 2014
Table 3	Arsenic in Groundwater Monitoring Wells, Third and Fourth Quarters 2014
Table 4	Mann-Kendall Trend Test Evaluation for Arsenic in Groundwater, Pre- and Post-Remedy Data through October 2014
Table 5	Mann-Kendall Trend Test Evaluation for Arsenic in Groundwater, Post-Remedy Data, April 2012 through October 2014
Table 6	Arsenic Mass Flux in Groundwater
Table 7	Groundwater Quality Remedy Effectiveness Evaluation Summary through Fourth Quarter 2014
Figure 1	Site Plan
Figure 2	Groundwater Elevation Contours, A-Zone Groundwater, July 8, 2014
Figure 3	Groundwater Elevation Contours, A-Zone Groundwater, October 27, 2014
Figure 4	Concentrations of Dissolved Arsenic, A-Zone Groundwater, July and October 2014
Appendix A	Summary of QA/QC
Appendix B	Field Parameters Measured Post Remedy Implementation
Appendix C	Complete Analytical Results for Reporting Period
Appendix D	Electronic Copies of Current and Historical Groundwater Monitoring Well Elevation and Analytical Data
Appendix E	Arsenic Concentration Trend Plots for CDM-108
Appendix F	Electronic Copies of Groundwater Chain-of-Custody Forms and Analytical Laboratory Reports
Appendix G	Figure of SBPA Property

Tables

Table 1
Well Construction Details and Groundwater Elevation Data, Third and Fourth Quarters 2014
The Sherwin-Williams Company
Emeryville, California

Well Number	Top of Casing Elevation (ft NAVD 88)	Approximate Screen Interval Depths (ft toc) Top	Approximate Screen Interval Depths (ft toc) Bottom	Approximate Screen Interval Elevations (ft NAVD 88) Top	Approximate Screen Interval Elevations (ft NAVD 88) Bottom	Hydraulic Zone Monitored	Date	Measured Depth to Water (ft toc)	Groundwater Elevation (ft NAVD 88)
Existing Wells and Piezometers									
Former Rifkin Property									
CDM-101	18.97	10.67	20.67	8.3	-1.7	A	7/8/2014	9.53	9.44
							10/28/2014	9.84	9.13
CDM-102	17.61	10.47	20.47	8.08	-1.92	A	7/8/2014	8.60	9.01
							10/28/2014	8.89	8.72
LF-35	18.93	24	27	-5.1	-8.1	A	7/8/2014	9.07	9.86
							10/28/2014	9.41	9.52
LF-36	18.87	7	16	11.9	2.9	A	7/8/2014	9.17	9.70
							10/28/2014	9.35	9.52
LF-37	18.54	7	16	11.5	2.5	A	7/8/2014	8.87	9.67
							10/28/2014	9.05	9.49
LF-38	18.51	20	27	-1.5	-8.5	A	7/8/2014	8.82	9.69
							10/28/2014	9.01	9.50
LF-39	18.97	18	26	1	-7	A	7/8/2014	9.19	9.78
							10/28/2014	9.40	9.57
LF-40	18.84	7	15	11.8	3.8	A	7/8/2014	9.08	9.76
							10/28/2014	9.30	9.54
LF-41	18.24	7	15	11.2	3.2	A	7/8/2014	8.44	9.80

Table 1
Well Construction Details and Groundwater Elevation Data, Third and Fourth Quarters 2014
The Sherwin-Williams Company
Emeryville, California

Well Number	Top of Casing Elevation (ft NAVD 88)	Approximate Screen Interval Depths		Approximate Screen Interval Elevations		Hydraulic Zone Monitored	Date	Measured Depth to Water (ft toc)	Groundwater Elevation (ft NAVD 88)
		(ft toc) Top	(ft toc) Bottom	(ft NAVD 88) Top	(ft NAVD 88) Bottom				
LF-41	18.24	7	15	11.2	3.2	A	10/28/2014	8.61	9.63
MW-3	17.30	6.5	19.5	10.8	-2.2	A	7/8/2014	7.42	9.88
							10/28/2014	7.62	9.68
RP-1	17.84	7	12	10.8	5.8	A	7/8/2014	7.98	9.86
							10/28/2014	8.21	9.63
RP-2	17.94	8.5	14.5	9.4	3.4	A	7/8/2014	8.19	9.75
							10/28/2014	8.35	9.59
RP-3	17.87	8	13	9.9	4.9	A	7/8/2014	8.22	9.65
							10/28/2014	8.52	9.35
RP-4	17.83	7	17	10.8	0.8	A	7/8/2014	8.14	9.69
							10/28/2014	8.32	9.51
RP-5	17.74	7	15	10.7	2.7	A	7/8/2014	8.09	9.65
							10/28/2014	8.27	9.47
Horton Street									
LF-12	17.65	7.5	17.5	10.2	0.1	A	7/8/2014	7.02	10.63
							10/28/2014	7.05	10.60
LF-13	17.48	7	17	10.5	0.5	A	7/8/2014	6.43	11.05
							10/28/2014	6.53	10.95
LF-27	17.83	10	18	7.8	-0.2	A	7/8/2014	7.44	10.39

Table 1
Well Construction Details and Groundwater Elevation Data, Third and Fourth Quarters 2014
The Sherwin-Williams Company
Emeryville, California

Well Number	Top of Casing Elevation (ft NAVD 88)	Approximate Screen Interval Depths		Approximate Screen Interval Elevations		Hydraulic Zone Monitored	Date	Measured Depth to Water (ft toc)	Groundwater Elevation (ft NAVD 88)
		(ft toc) Top	(ft toc) Bottom	(ft NAVD 88) Top	(ft NAVD 88) Bottom				
LF-27	17.83	10	18	7.8	-0.2	A	10/28/2014	7.51	10.32
LF-28	17.09	10	18	7.1	-0.9	A	7/8/2014	7.30	9.79
							10/28/2014	7.47	9.62
LF-29	16.40	6	19	10.4	-2.6	A	7/8/2014	6.83	9.57
							10/28/2014	6.95	9.45
Other Properties									
MD-5	12.03	5.77	15.77	6.26	-3.74	A	7/8/2014	6.16	5.87
							10/28/2014	6.55	5.48
Sherwin-Williams Property									
CDM-103	20.56	12.77	22.77	7.79	-2.21	A	7/8/2014	11.64	8.92
							10/28/2014	11.15	9.41
CDM-104	18.60	10.79	20.79	7.81	-2.19	A	7/8/2014	9.47	9.13
							10/28/2014	9.69	8.91
CDM-105	15.83	7.63	17.63	8.2	-1.8	A	7/8/2014	8.60	7.23
							10/28/2014	9.11	6.72
CDM-106	16.21	8.31	18.31	7.9	-2.1	A	7/8/2014	8.62	7.59
							10/28/2014	8.90	7.31
CDM-107	17.38	9.49	19.49	7.89	-2.11	A	7/8/2014	10.79	6.59
							10/28/2014	10.92	6.46

Table 1
Well Construction Details and Groundwater Elevation Data, Third and Fourth Quarters 2014
The Sherwin-Williams Company
Emeryville, California

Well Number	Top of Casing Elevation (ft NAVD 88)	Approximate Screen Interval Depths		Approximate Screen Interval Elevations		Hydraulic Zone Monitored	Date	Measured Depth to Water (ft toc)	Groundwater Elevation (ft NAVD 88)
		(ft toc) Top	(ft toc) Bottom	(ft NAVD 88) Top	(ft NAVD 88) Bottom				
CDM-108	17.71	9.64	19.64	8.07	-1.93	A	7/8/2014	10.63	7.08
							10/28/2014	10.84	6.87
CDM-109	15.44	7.08	17.08	8.36	-1.64	A	7/8/2014	8.06	7.38
							10/28/2014	8.21	7.23
CDM-110	15.62	7.62	17.62	8	-2	A	7/8/2014	5.56	10.06
							10/28/2014	5.72	9.90
CDM-111	18.14	10.33	20.33	7.81	-2.19	A	7/8/2014	8.58	9.56
							10/28/2014	8.81	9.33
CDM-112	15.70	7.65	17.65	8.05	-1.95	A	7/8/2014	5.64	10.06
							10/28/2014	5.69	10.01
CDM-113	15.47	7.51	17.51	7.96	-2.04	A	7/8/2014	5.68	9.79
							10/28/2014	5.89	9.58
CDM-114	14.72	6.73	16.73	7.99	-2.01	A	7/8/2014	4.43	10.29
							10/28/2014	4.66	10.06
LF-18	15.75	8	18	7.8	-2.3	A	7/8/2014	9.98	5.77
							10/28/2014	10.07	5.68
LF-42	17.29	7	16	10.3	1.3	A	7/8/2014	7.82	9.47
							10/28/2014	8.02	9.27
PZ-101	19.01	11.5	21.5	7.51	-2.49	A	7/8/2014	10.08	8.93

Table 1
Well Construction Details and Groundwater Elevation Data, Third and Fourth Quarters 2014
The Sherwin-Williams Company
Emeryville, California

Well Number	Top of Casing Elevation (ft NAVD 88)	Approximate Screen Interval Depths		Approximate Screen Interval Elevations		Hydraulic Zone Monitored	Date	Measured Depth to Water (ft toc)	Groundwater Elevation (ft NAVD 88)
		(ft toc) Top	(ft toc) Bottom	(ft NAVD 88) Top	(ft NAVD 88) Bottom				
PZ-101	19.01	11.5	21.5	7.51	-2.49	A	10/28/2014	10.34	8.67
PZ-102	16.64	8.62	18.62	8.02	-1.98	A	7/8/2014	9.32	7.32
							10/28/2014	9.78	6.86

Data updated by MSM. Proofed by ENW.

Notes:

ft toc = Feet below top of casing

ft NAVD 88 = Feet relative to North American Vertical Datum of 1988

Table 2
Volatile Organic Compounds (EPA 8260) in Groundwater Monitoring Wells, Fourth Quarter 2014
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
CDM-101	29-Oct-14	<0.0005	0.0008	<0.0005	<0.01	<0.01 U12	0.0002 J	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	29-Oct-14	<0.0005	0.0008	<0.0005	<0.01	<0.01 U12	0.0002 J	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-102	29-Oct-14	<0.0005	0.0011	<0.0005	<0.01	<0.01 U5	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-107	29-Oct-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0001 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-108	29-Oct-14	<0.0005	0.0002 J	<0.0005	<0.01	<0.01	<0.0005	0.0002 J	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table 2
Volatile Organic Compounds (EPA 8260) in Groundwater Monitoring Wells, Fourth Quarter 2014
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-pentanone	Bromobenzene	Carbon Disulfide	Chloroethane	Chloromethane	Dichlorodifluoromethane	Isopropylbenzene	n-Butylbenzene
CDM-101	29-Oct-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	29-Oct-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-102	29-Oct-14	0.0002 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-107	29-Oct-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-108	29-Oct-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table 2
Volatile Organic Compounds (EPA 8260) in Groundwater Monitoring Wells, Fourth Quarter 2014
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chloromethane
CDM-101	29-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
DUP	29-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
CDM-102	29-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
CDM-107	29-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
CDM-108	29-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0002 J	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table 2
Volatile Organic Compounds (EPA 8260) in Groundwater Monitoring Wells, Fourth Quarter 2014
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total

Data QA/QC performed by OM.

Notes:

< = Analyte was not detected at or greater than the detection limit reported.

DUP = Duplicate sample (field duplicate)

J = Concentration is estimated.

U5 = Quantified as nondetect (U) based on field blank contamination evaluation.

U12 = Quantified as nondetect (U) based on source water contamination evaluation.

Abbreviations for analytes:

1,1,1-TCA = 1,1,1-Trichloroethane
1,1,2-TCA = 1,1,2-Trichloroethane
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
1,2,4-TMB = 1,2,4-Trimethylbenzene
1,2-DCA = 1,2-Dichloroethane
1,2-DCB = 1,2-Dichlorobenzene
1,2-DCP = 1,2-Dichloropropane
1,3,5-TMB = 1,3,5-Trimethylbenzene
cis-1,2-DCE = cis-1,2-Dichloroethene
PCE = Tetrachloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
TCE = Trichloroethene
MTBE = Methyl tertiary-butyl ether

Table 3
Arsenic in Groundwater Monitoring Wells
Third and Fourth Quarters 2014
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

DTSC Cleanup Goal (mg/L)			0.036
Well Number	**Notes**	**Date Sampled**	**Arsenic**
CDM-101		29-Oct-14	**0.049**
DUP		29-Oct-14	**0.05**
CDM-102		29-Oct-14	0.0076
CDM-103		27-Oct-14	< 0.005
DUP		27-Oct-14	< 0.005
CDM-104		30-Oct-14	< 0.005
CDM-105		28-Oct-14	**0.06**
CDM-106		28-Oct-14	**1.8**
CDM-107		29-Oct-14	0.0098
CDM-108		08-Jul-14	**0.22**
DUP		08-Jul-14	**0.23**
CDM-108		29-Oct-14	**0.17**
CDM-109		30-Oct-14	**0.25**
LF-36		31-Oct-14	**0.039**
DUP		31-Oct-14	0.035
LF-37		28-Oct-14	0.0069
LF-40		28-Oct-14	0.0093
LF-41		28-Oct-14	**0.069**
DUP		28-Oct-14	**0.069**
LF-42		30-Oct-14	< 0.005
DUP		30-Oct-14	< 0.005
MW-3		30-Oct-14	**0.074**
RP-1		31-Oct-14	**0.08**
RP-2		30-Oct-14	**0.045**
RP-3		28-Oct-14	0.0057
RP-4		30-Oct-14	0.0061
RP-5		30-Oct-14	0.012

Notes: All notes are listed at the end of this table - see last page.

Table 3
Arsenic in Groundwater Monitoring Wells
Third and Fourth Quarters 2014
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

DTSC Cleanup Goal (mg/L)			0.036
Well Number	**Notes**	**Date Sampled**	**Arsenic**

Data QA/QC performed by EW.

Notes:

Samples were analyzed using EPA Method 6010B.

< = Analyte was not detected at or greater than the detection limit reported.

DUP = Duplicate sample (field duplicate)

Screening levels shown are the DTSC cleanup goals assigned to the Sherwin-Williams site.

Results shown in bold are above the DTSC cleanup goal for arsenic.

Table 4
Mann-Kendall Trend Test Evaluation for Arsenic in Groundwater
Pre- and Post-Remedy Data through October 2014
The Sherwin-Williams Company
Emeryville, California

Location	Number of Samples	Number of Detections	Sum of Trend	Trend	Date Last Sampled
LF-36	48	43	-154	No Trend	10/31/2014
LF-37	36	20	-56	No Trend	10/28/2014
LF-40	36	24	34	No Trend	10/28/2014
LF-41	36	34	114	No Trend	10/28/2014
LF-42	36	19	-203	Decreasing	10/30/2014
MW-3	63	60	944	Increasing	10/30/2014
RP-1	67	65	-168	No Trend	10/31/2014
RP-2	70	61	842	Increasing	10/30/2014
RP-3	59	27	-429	Decreasing	10/28/2014
RP-4	73	64	1091	Increasing	10/30/2014
RP-5	64	51	88	No Trend	10/30/2014

Notes:

One-half of the detection limit is assumed as the actual value when the result is below the detection limit. In the case of duplicate sample results, only the primary sample result was used.

The 0.05 confidence limit is used to evaluate trend.

When the number of observations (sample size, "n") is greater than 40, a normal approximation to the Mann-Kendall test is used (Gilbert 1987). This approximation entails calculating the variance of S and using a normal distribution to test for trend.

Table 5
Mann-Kendall Trend Test Evaluation for Arsenic in Groundwater, Post-Remedy Data
April 2012 through October 2014
The Sherwin-Williams Company
Emeryville, California

Location	Number of Samples	Number of Detections	Sum of Trend	Trend	Date Last Sampled
CDM-101	6	6	1	No Trend	10/29/2014
CDM-102	6	3	9	Insufficient Detections	10/29/2014
CDM-103	6	3	-1	Insufficient Detections	10/27/2014
CDM-104	6	0	0	Insufficient Detections	10/30/2014
CDM-105	6	6	6	No Trend	10/28/2014
CDM-106	6	6	1	No Trend	10/28/2014
CDM-107	6	2	9	Insufficient Detections	10/29/2014
CDM-108	10	9	41	Increasing	10/29/2014
CDM-109	6	6	5	No Trend	10/30/2014
LF-36	6	6	3	No Trend	10/31/2014
LF-37	6	2	1	Insufficient Detections	10/28/2014
LF-40	6	5	1	No Trend	10/28/2014
LF-41	6	5	8	No Trend	10/28/2014
LF-42	6	0	0	Insufficient Detections	10/30/2014
MW-3	10	10	-16	No Trend	10/30/2014
RP-1	10	10	6	No Trend	10/31/2014
RP-2	6	6	3	No Trend	10/30/2014
RP-3	6	3	1	Insufficient Detections	10/28/2014
RP-4	10	10	-27	Decreasing	10/30/2014
RP-5	6	6	-2	No Trend	10/30/2014

Table 5
Mann-Kendall Trend Test Evaluation for Arsenic in Groundwater, Post-Remedy Data
April 2012 through October 2014
The Sherwin-Williams Company
Emeryville, California

Location	Number of Samples	Number of Detections	Sum of Trend	Trend	Date Last Sampled

Notes:

One-half of the detection limit is assumed as the actual value when the result is below the detection limit. In the case of duplicate sample results, only the primary sample result was used.

The 0.05 confidence limit is used to evaluate trend.

When the number of observations (sample size, "n") is greater than 40, a normal approximation to the Mann-Kendall test is used (Gilbert 1987). This approximation entails calculating the variance of S and using a normal distribution to test for trend.

Mann-Kendall analysis requires a minimum of four results to establish a trend. Trends were not performed for locations with less than four detections; these locations were identified as insufficient detects. All locations with insufficient detects are currently below the cleanup goal for arsenic, or are currently non-detect at a reporting limit below the cleanup goal.

Table 6
Arsenic Mass Flux in Groundwater
The Sherwin-Williams Company
Emeryville, California

Depth-to-Water Measurement Date	Sampling Date	Arsenic in Groundwater at CDM-101 (mg/L)	Arsenic in Groundwater at CDM-102 (mg/L)	C (mg/L)	K (cm/s)	i (cm/cm)	Width of transect (ft)	Saturated Thickness of Transect (ft)	A (ft^2)	CF (ft/cm)/[(sec/day) (L/ft^3)(g/mg)]	w (g/day)
4/16/2012	4/17/2012	0.033	< 0.005	0.018	1.00E-04	-0.012	70	12.72	890.40	80.3	-1.58E-03
5/14/2012				0.018	1.00E-04	-0.013	70	11.71	819.35	80.3	-1.47E-03
6/11/2012				0.018	1.00E-04	-0.008	70	11.83	827.75	80.3	-8.95E-04
7/18/2012				0.018	1.00E-04	-0.010	70	11.49	804.30	80.3	-1.15E-03
8/15/2012				0.018	1.00E-04	-0.007	70	11.73	821.10	80.3	-8.70E-04
9/13/2012				0.018	1.00E-04	-0.007	70	11.76	822.85	80.3	-8.76E-04
10/17/2012	10/19/2012	0.040	< 0.005	0.021	1.00E-04	-0.006	70	11.79	825.30	80.3	-7.84E-04
11/16/2012				0.021	1.00E-04	-0.006	70	12.11	847.70	80.3	-8.21E-04
12/14/2012				0.021	1.00E-04	-0.008	70	12.93	904.75	80.3	-1.18E-03
1/18/2013				0.021	1.00E-04	-0.007	70	12.51	875.35	80.3	-1.05E-03
2/22/2013				0.021	1.00E-04	-0.008	70	11.94	835.80	80.3	-1.07E-03
3/21/2013				0.021	1.00E-04	-0.006	70	12.16	850.85	80.3	-8.49E-04
4/19/2013	4/22/2013	0.043	< 0.005	0.023	1.00E-04	-0.008	70	12.25	857.15	80.3	-1.27E-03
7/16/2013				0.023	1.00E-04	-0.006	70	11.67	816.55	80.3	-8.94E-04
10/7/2013	10/7/2013	0.032	< 0.005	0.017	1.00E-04	-0.005	70	11.39	797.30	80.3	-4.97E-04
1/3/2014				0.017	1.00E-04	-0.005	70	11.48	803.60	80.3	-6.08E-04
4/22/2014	4/28/2014	0.016	0.0064	0.011	1.00E-04	-0.006	70	12.12	848.05	80.3	-4.37E-04
7/8/2014				0.011	1.00E-04	-0.005	70	11.51	805.35	80.3	-3.38E-04
10/27/2014	10/29/2014	0.049	0.0076	0.028	1.00E-04	-0.005	70	11.21	784.35	80.3	-8.30E-04
Average arsenic mass through transect (g/day):											**-9.20E-04**
Total annual arsenic mass through transect (based on average g/day, lb/year)											*-7.40E-04*

Notes:

Chemical mass flux through transect is calculated by (CDM Smith 2012): w = (C) (K) (i) (A) (CF)

C = concentration of chemical through transect: as stated in Section C.5.5 of O&M Plan (CDM Smith 2012), if groundwater movement is away from the former Rifkin property, C will be the average concentration of CDM-101 and CDM-102. For non-detect values, half of the reporting limit was used in the calculation

K = hydraulic conductivity: hydraulic conductivity of low permeability backfill; K value from Appendix N of the Remedy Design Implementation Plan (CDM 2011).

i = hydraulic gradient: hydraulic gradient is the average hydraulic gradient between CDM-101 and RP-3, and CDM-102 and RP-3 for each water-level event. Negative hydraulic gradient indicates flow of groundwater is away from former Rifkin property toward Sherwin-Williams property.

A = cross-sectional area associated with the transect: area is calculated using distance of CDM-101 and CDM-102, and the average saturated thickness of the transect; saturated thickness is the average saturated thickness of CDM-101 and CDM-102 during each water-level measurement event.

CF = conversion factor, 80.3 (ft/cm)/(sec/day)(L/ft^3)(g/mg); (CDM Smith 2012)

w = chemical mass through transect mg = milligram cm = centimeter ft = feet lb = pounds

< = non-detect at reporting limit shown L = liter s = second g = grams

Data entered by MG, QC by ENW.

Table 7
Groundwater Quality Remedy Effectiveness Evaluation Summary
through Fourth Quarter 2014
The Sherwin-Williams Company
Emeryville, California

Well[1]	Remedy Effectiveness Evaluation Criteria	Current Effectiveness Status	Arsenic less than CG?	VOCs less than CG?	Historical Arsenic Trend [6]	Post-Remedy Arsenic Trend	Max. Arsenic Conc. Prior to and During Remedy Implementation (mg/L)	Max. Arsenic Conc. Post Remedy Implementation (mg/L)	Most Recent Arsenic Conc. (mg/L)
Former Rifkin Property									
CDM-101	COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing four years after remedy implementation, and arsenic is less than 5 mg/L four years after remedy implementation	Meets Criteria [5]	No	No[2]	NA	No Trend	NA	0.05	0.049/0.05[DUP]
CDM-102	COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing four years after remedy implementation, and arsenic is less than 5 mg/L four years after remedy implementation	Meets Criteria [5]	Yes	No[3]	NA	Insufficient Detections	NA	0.0076	0.0076
RP-1[a]	Arsenic concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	No	Yes [7]	No Trend	No Trend	0.14	0.08	0.08
RP-2[a]	Arsenic concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	No	Yes [7]	Increasing	No Trend	0.042	0.045	0.045
RP-4[a]	Arsenic concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	Yes	Yes [7]	Increasing	Decreasing	0.025	0.02	0.0061
RP-5[a]	Arsenic concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	Yes	Yes [7]	No Trend	No Trend	0.038	0.012	0.012
LF-36[a]	Arsenic concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	No	Yes [7]	No Trend	No Trend	0.065	0.039	0.039 / 0.035[DUP]
LF-41[a]	Arsenic concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	No	Yes [7]	No Trend	No Trend	0.097	0.069	0.069/0.069[DUP]
Sherwin-Williams Property									
LF-18 [7]	COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	Yes	Yes [7]	Decreasing	Insufficient Data	0.048	< 0.005	< 0.005
CDM-103	COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	Yes	Yes [7]	NA	Insufficient Detections	NA	0.015	< 0.005/ < 0.005[DUP]
CDM-104	COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria [5]	Yes	No [4][7]	NA	Insufficient Detections	NA	< 0.005	< 0.005
CDM-107	COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	Yes	Yes	NA	Insufficient Detections	NA	0.0098	0.0098
CDM-108	COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Does Not Meet Criteria	No	Yes	NA	Increasing	NA	0.22/0.23 [DUP]	0.17
CDM-109	COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	No	Yes [7]	NA	No Trend	NA	0.38	0.25
CDM-112 [7]	COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	Yes	Yes [7]	NA	Insufficient Data	NA	< 0.005	< 0.005
Union Pacific Property									
LF-24 [7]	COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	Yes	Yes [7]	Decreasing	Insufficient Data	0.024	< 0.005	< 0.005
LF-25 [7]	COC concentrations are less than site cleanup goals or their trends are statistically stable to decreasing	Meets Criteria	Yes	Yes [7]	Decreasing	Insufficient Data	0.16	0.031	0.021

Notes:
All arsenic concentrations presented in mg/L.
Groundwater quality effectiveness based on criteria established in O&M Plan (CDM Smith 2012).
1 - Table limited to wells with established groundwater quality remedy effectiveness evaluation criteria; see O&M Plan Table C-2.
2 - 1,2-dichloroethane detected at 0.0008 mg/L in October 2014; cleanup goal for 1,2-dichloroethane is 0.0005 mg/L.
3 - 1,2-dichloroethane detected at 0.0011 mg/L in October 2014; cleanup goal for 1,2-dichloroethane is 0.0005 mg/L.
4 - 1,2-dichloroethane detected at 0.0008 mg/L in April 2014; cleanup goal for 1,2-dichloroethane is 0.0005 mg/L.
5 - Meets criteria based on natural attenuation remedy; VOC trends will be evaluated during 5-year review.
6 - Trend includes pre remedy implementation data.
7 - Not monitored during October 2014 event.
a - Designated Rifkin Guard Well.
COC - contaminant of concern
[DUP] - duplicate sample for same event
mg/L - milligram per liter
VOCs - volatile organic compounds
Conc. - concentration
CG - cleanup goal: 0.036 mg/L for arsenic, varies for VOCs

Mann-Kendall analysis requires a minimum of four results to establish a trend. Trends were not performed for locations with less than four detections; these locations were identified as insufficient detects.
All locations with insufficient detects are currently below the cleanup goal for arsenic, or are currently non-detect at a reporting limit below the cleanup goal.
NA - not available. CDM-101 through CDM-114 were installed in 2012 as part of remedy implementation.

Figures



LEGEND

LF-12	⊕	A-zone monitoring well
PZ-101	⊕	A-zone piezometer
EX-8	⊘	Extraction well
LF-10	⊕	A-zone monitoring well abandoned
LF-B3	◑	B-zone monitoring well abandoned
LF-PZ1	⊕	A-zone piezometer abandoned
EX-8	⊘	Extraction well abandoned
MD-5	⊠	South Bayfront Project Area monitoring well

- Property Boundary
- Original Slurry Wall
- Slurry Wall Extension
- Slurry Wall Breach
- Interceptor Trench and Membrane Barrier

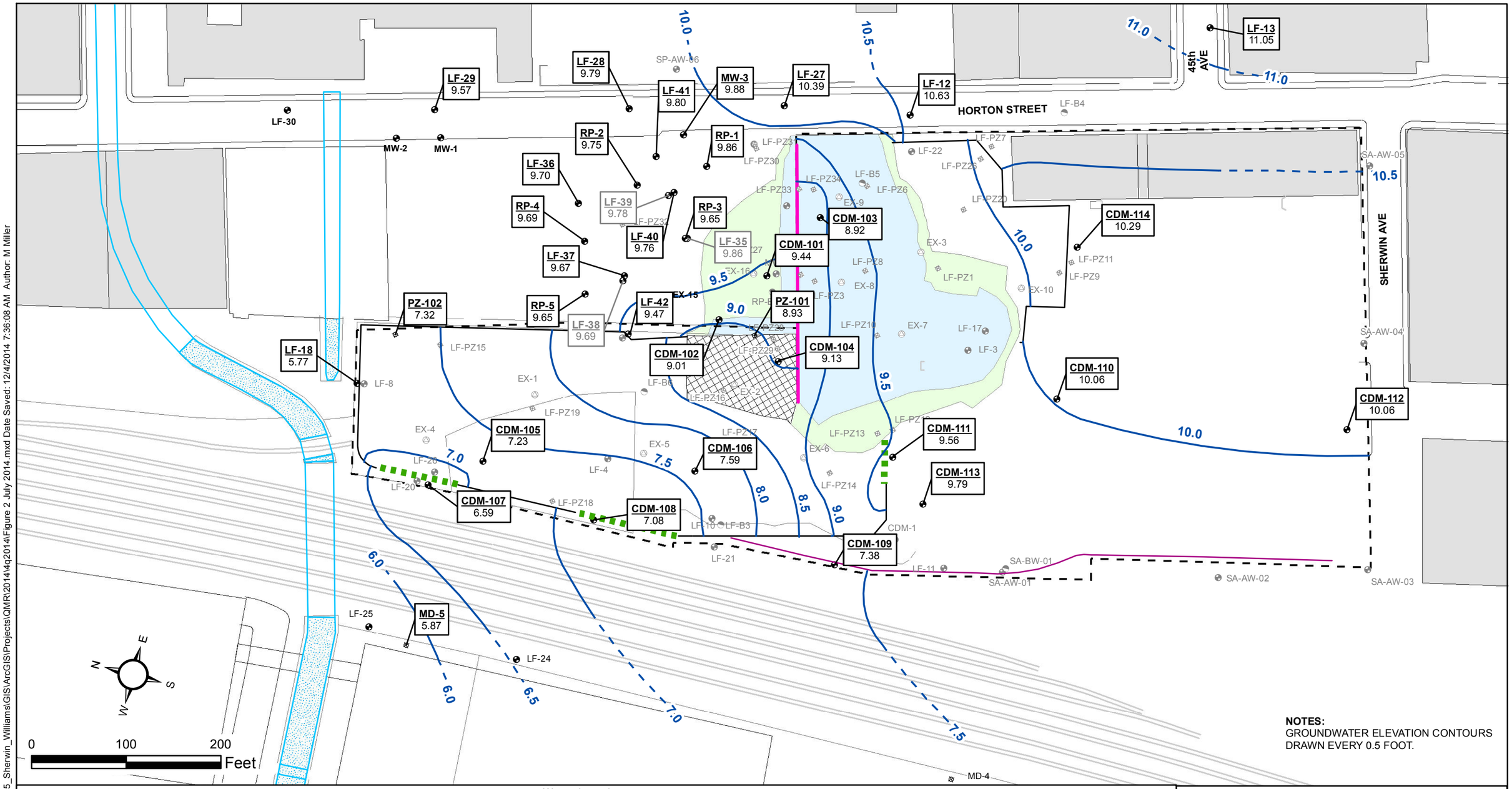
- Water channel (aboveground/underground)
- Building
- Former building
- Saturated Zone Excavation, Excavated to EL -11 Feet. Backfilled with High Permeability Backfill from EL -11 Feet to 10 Feet, and Low Permeability Backfill from EL 10 Feet to Surface
- Excavated to EL 0 Feet and Backfilled with Low Permeability Backfill
- Excavated to EL -11 Feet and Backfilled with Low Permeability Backfill

SHERWIN-WILLIAMS COMPANY, EMERYVILLE, CA

SITE PLAN

ARCADIS

FIGURE 1



NOTES:
GROUNDWATER ELEVATION CONTOURS DRAWN EVERY 0.5 FOOT.

LEGEND

LF-12	A-zone monitoring well	Property boundary
PZ-101	A-zone piezometer	Original Slurry Wall
EX-15	Extraction well	Slurry Wall Extension
LF-10	A-zone monitoring well abandoned	Slurry Wall Breach
LF-B3	B-zone monitoring well abandoned	Interceptor Trench and Membrane Barrier
LF-PZ1	A-zone piezometer abandoned	Groundwater Elevation Contour (Dashed Where Inferred)
EX-8	Extraction well abandoned	
MD-5	South Bayfront Project Area monitoring well	

- Water channel (aboveground/underground)
- Building
- Former building
- Saturated Zone Excavation, Excavated to EL -11 Feet. Backfilled with High Permeability Backfill from EL -11 Feet to 10 Feet, and Low Permeability Backfill from EL 10 Feet to Surface
- Excavated to EL 0 Feet and Backfilled with Low Permeability Backfill
- Excavated to EL -11 Feet and Backfilled with Low Permeability Backfill

LF-42 9.47 — LOCATION ID; GROUNDWATER ELEVATION (FEET NAVD 88)

LF-35 9.86 — A-ZONE WELLS SCREENED IN THE LOWER PORTION OF THE A-ZONE. DATA NOT USED IN CONTOURING

SHERWIN-WILLIAMS COMPANY, EMERYVILLE, CA

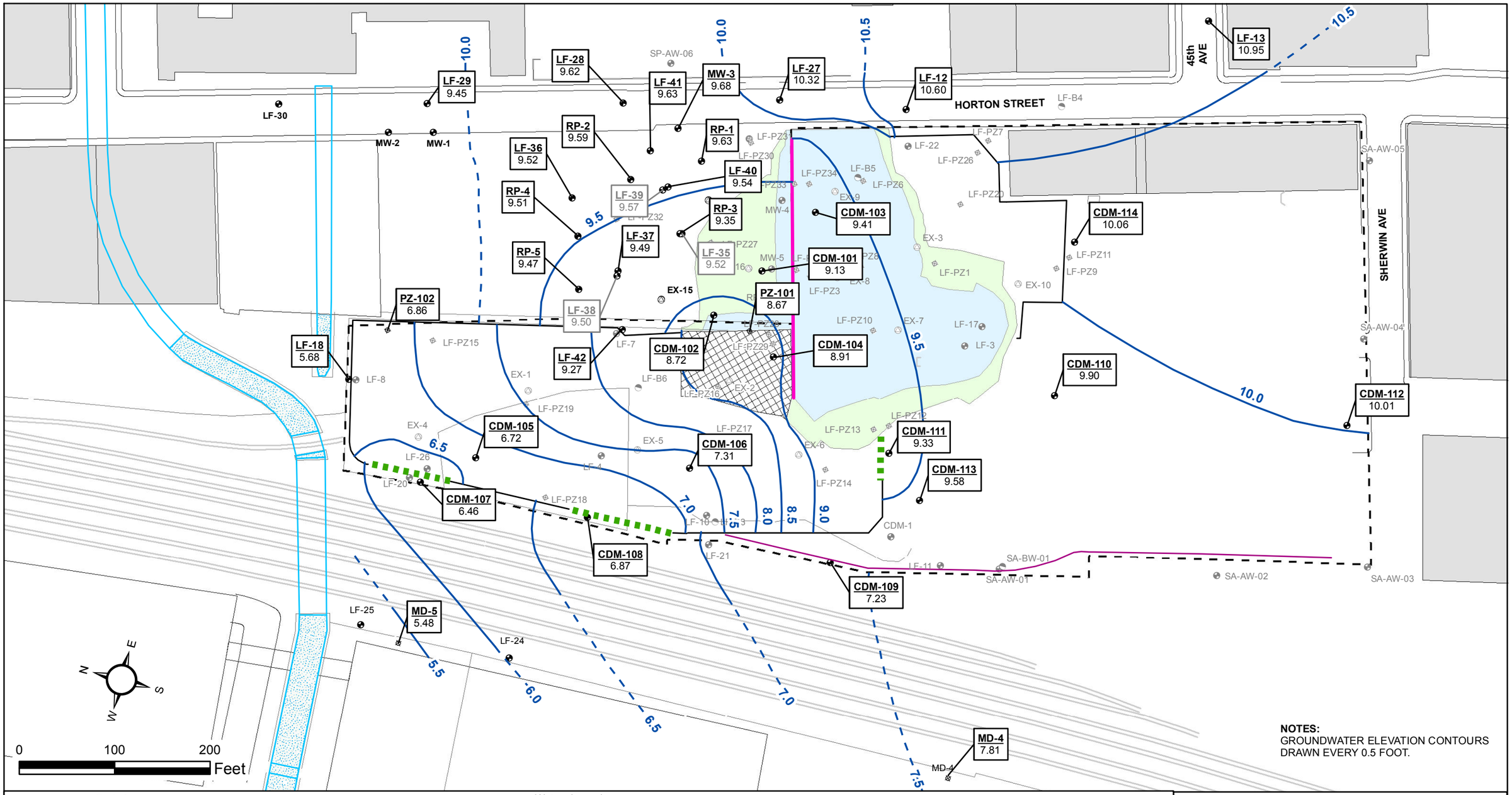
GROUNDWATER ELEVATION CONTOURS A-ZONE GROUNDWATER JULY 8, 2014

ARCADIS

FIGURE 2

Path: C:\Users\msmiller\Desktop\06495_Sherwin_Williams\GIS\ArcGIS\Projects\QMR\2014\4q2014\Figure 2 July 2014.mxd Date Saved: 12/4/2014 7:36:08 AM Author: M Miller

Path: C:\Users\msmiller\Desktop\06495_Sherwin_Williams\GIS\ArcGIS\Projects\QMR\20141q42014\Figure 3 Oct 2014.mxd Date Saved: 12/19/2014 1:31:53 PM Author: M Miller



NOTES:
GROUNDWATER ELEVATION CONTOURS DRAWN EVERY 0.5 FOOT.

LEGEND

- LF-12 — A-zone monitoring well
- PZ-101 — A-zone piezometer
- EX-15 — Extraction well
- LF-10 — A-zone monitoring well abandoned
- LF-B3 — B-zone monitoring well abandoned
- LF-PZ1 — A-zone piezometer abandoned
- EX-8 — Extraction well abandoned
- MD-5 — South Bayfront Project Area monitoring well

- Property boundary
- Original Slurry Wall
- Slurry Wall Extension
- Slurry Wall Breach
- Interceptor Trench and Membrane Barrier
- Groundwater Elevation Contour (Dashed Where Inferred)

- Water channel (aboveground/underground)
- Building
- Former building
- Saturated Zone Excavation, Excavated to EL -11 Feet. Backfilled with High Permeability Backfill from EL -11 Feet to 10 Feet, and Low Permeability Backfill from EL 10 Feet to Surface
- Excavated to EL 0 Feet and Backfilled with Low Permeability Backfill
- Excavated to EL -11 Feet and Backfilled with Low Permeability Backfill

CDM-110 9.90 — LOCATION ID; GROUNDWATER ELEVATION (FEET NAVD 88)

LF-38 9.50 — A-ZONE WELLS SCREENED IN THE LOWER PORTION OF THE A-ZONE. DATA NOT USED IN CONTOURING

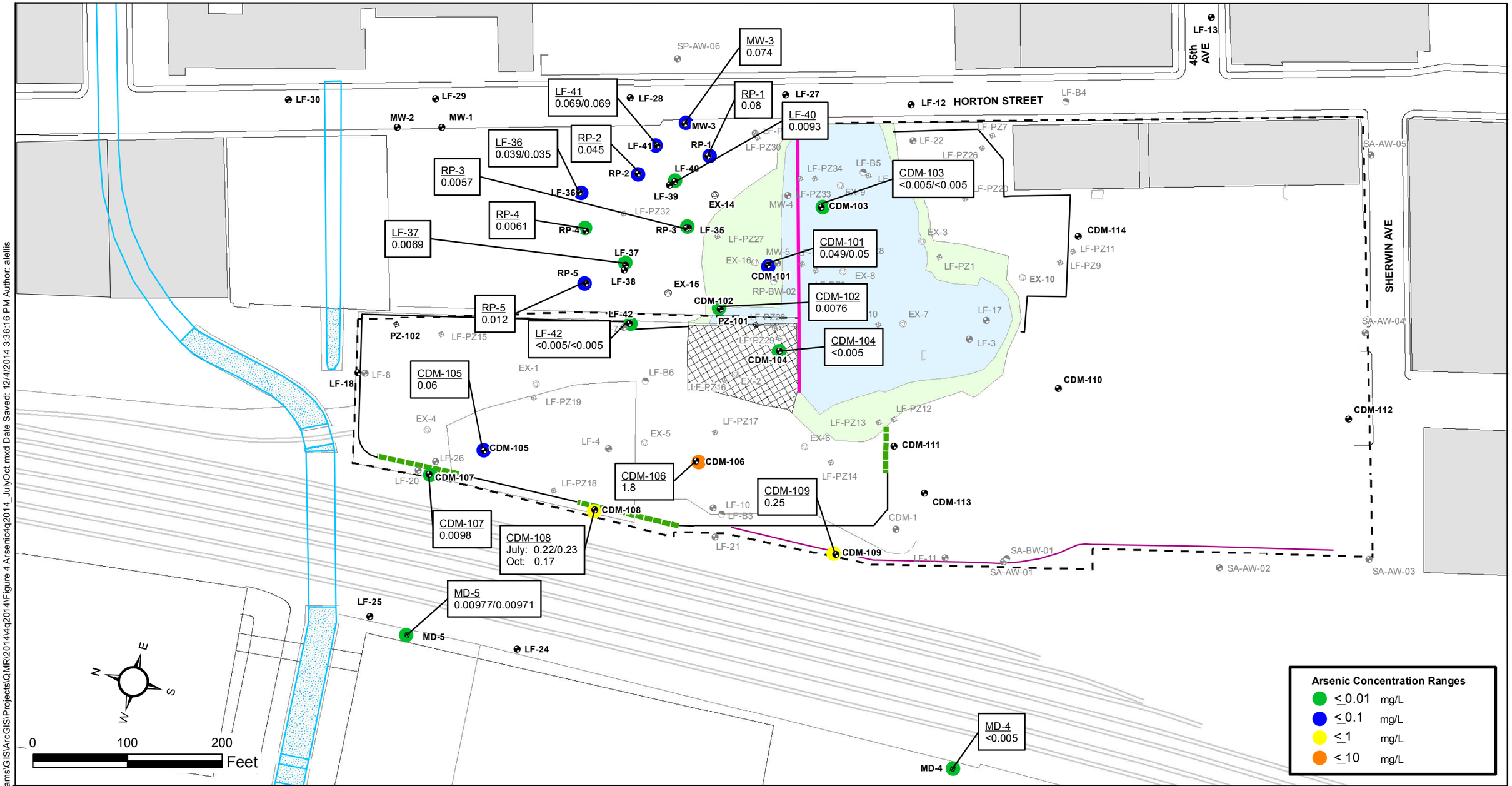
NOTES:
MD-4 Monitored By SLR Consulting
MD-5 Monitored By EKI Personnel

SHERWIN-WILLIAMS COMPANY, EMERYVILLE, CA

GROUNDWATER ELEVATION CONTOURS A-ZONE GROUNDWATER OCTOBER 27, 2014

ARCADIS

FIGURE 3



LEGEND

LF-12	A-zone monitoring well
PZ-101	A-zone piezometer
EX-8	Extraction well
LF-10	A-zone monitoring well abandoned
LF-B3	B-zone monitoring well abandoned
LF-PZ1	A-zone piezometer abandoned
EX-8	Extraction well abandoned
MD-5	South Bayfront Project Area monitoring well

- Property boundary
- Original Slurry Wall
- Slurry Wall Extension
- Slurry Wall Breach
- Interceptor Trench and Membrane Barrier

- Water channel (aboveground/underground)
- Building
- Former building
- Saturated Zone Excavation, Excavated to EL -11 Feet. Backfilled with High Permeability Backfill from EL -11 Feet to 10 Feet, and Low Permeability Backfill from EL 10 Feet to Surface
- Excavated to EL 0 Feet and Backfilled with Low Permeability Backfill
- Excavated to EL -11 Feet and Backfilled with Low Permeability Backfill

NOTES:
MD-4 IS MONITORED BY SLR PERSONNEL AND
MD-5 IS MONITORED BY EKI PERSONNEL

Location ID
CDM-108
July: 0.22/0.23
Oct: 0.17
Duplicate Result
Result (Data is from October 2014 unless noted)

SHERWIN-WILLIAMS COMPANY, EMERYVILLE, CA

CONCENTRATIONS OF DISSOLVED ARSENIC, A-ZONE GROUNDWATER, JULY AND OCTOBER 2014

ARCADIS

FIGURE 4

Path: K:\001_EMV\006495_Sherwin_Williams\GIS\ArcGIS\Projects\QMR\20144q2014\Figure 4 Arsenic4q2014_JulyOct.mxd Date Saved: 12/4/2014 3:36:16 PM Author: alellis

ARCADIS

Appendix A

Summary of QA/QC

Table A-1a
Summary of Sampling QA/QC - Third Quarter 2014
Groundwater Extraction and Monitoring Wells
The Sherwin-Williams Company, Emeryville, California

Site Name:	**Site Address:**	**Monitoring Period Covered:**
The Sherwin-Williams Facility (EM002616.0014)	1450 Sherwin Avenue Emeryville, California	July 1, 2014 through September 30, 2014

Sampling Performed By: Miljan Draganic and Adam Kinnard

Firm Name: ARCADIS U.S., Inc.
Firm Address: 2000 Powell Street, 7th Floor, Emeryville, California
Firm Contact: Lucas Goldstein
Firm Telephone Number: (510) 652-4500

Were chain-of-custody forms completed for all samples?	☑ Yes	☐ No
Were field parameters stabilized prior to taking samples?	☑ Yes	☐ No
For VOCs samples, was there zero head space in sample containers?	☑ Yes	☐ No
Were samples preserved according to analytical method?	☑ Yes	☐ No
Were the required field QA/QC samples taken?	☑ Yes	☐ No

For any questions above answered with "No", please provide an explanation:

Data entered by ENW; proofed by MG.

Table A-1b
Summary of Sampling QA/QC - Fourth Quarter 2014
Groundwater Extraction and Monitoring Wells
The Sherwin-Williams Company, Emeryville, California

Site Name:	**Site Address:**	**Monitoring Period Covered:**
The Sherwin-Williams Facility (EM002616.0014)	1450 Sherwin Avenue Emeryville, California	October 1, 2014 through December 31, 2014

Sampling Performed By: Miljan Draganic, and Miguel Gomez

Firm Name: ARCADIS U.S., Inc.
Firm Address: 2000 Powell Street, 7th Floor, Emeryville, California
Firm Contact: Lucas Goldstein
Firm Telephone Number: (510) 652-4500

Were chain-of-custody forms completed for all samples?	☑ Yes	☐ No
Were field parameters stabilized prior to taking samples?	☑ Yes	☐ No
For VOCs samples, was there zero head space in sample containers?	☑ Yes	☐ No
Were samples preserved according to analytical method?	☑ Yes	☐ No
Were the required field QA/QC samples taken?	☑ Yes	☐ No

For any questions above answered with "No", please provide an explanation:

Data entered by ENW; proofed by MG.

Table A-2a
Summary of Analytical QA/QC - Third Quarter 2014
Groundwater Extraction and Monitoring Wells
The Sherwin-Williams Company, Emeryville, California

Site Name:	**Site Address:**	**Monitoring Period Covered:**
The Sherwin-Williams Facility (EM002616.0014)	1450 Sherwin Avenue Emeryville, California	July 1, 2014 through September 30, 2014

Sampling Performed By: Miljan Draganic and Adam Kinnard
Lab Name: Curtis & Tompkins, Ltd.
Lab Address: 2323 Fifth Street, Berkeley, California 94710
Lab Contact: Tracy Babjar
Lab Telephone Number: (510) 486-0900

Analytical QA/QC Performed By:
Firm Name: ARCADIS U.S., Inc.
Firm Address: 1100 Olive Way, Suite 800, Seattle, WA 98101
Firm Contact: Erica Whiting
Firm Telephone Number: (206) 726-4743

Analytical Method Used: (check applicable methods)

- ☑ Arsenic by EPA Method 6010 B
- ☐ Cadmium by EPA Method_____
- ☐ Chromium (total) by EPA Method_____
- ☐ Chromium (hexavalent)
- ☐ Copper by EPA Method_____
- ☐ Lead by EPA Method_____
- ☐ Mercury by EPA Method_____
- ☐ Nickel by EPA Method_____
- ☐ Selenium by EPA Method_____
- ☐ Silver by EPA Method_____
- ☐ Zinc by EPA Method_____
- ☐ Halogenated Volatile Organics by EPA Method 601 or 8010
- ☐ Aromatic and Unsaturated Volatile Organics by EPA 602 or 8020
- ☐ Volatile Organics by EPA Method 624 or 8240 or 8260
- ☐ Semivolatile Organics by EPA Method 625 or 8270
- ☐ EDB and DBCP by EPA Method 504
- ☐ TPH gasoline by EPA Method 8260
- ☐ TPH diesel by EPA Method 8015 modified
- ☐ TPH motor oil by EPA Method 8015 modified

Is the lab state-certified for the above analytical method(s)?	☑ Yes ☐ No
Were analyses performed according to standard methods?	☑ Yes ☐ No
Were sample holding times met?	☑ Yes ☐ No
Were all reported analytical results values above MDLs?	☑ Yes ☐ No
Were QA/QC samples (i.e., blanks, field replicates, spikes, and surrogates) analyzed in accordance and consistent with the analytical method?	☑ Yes ☐ No
Did QA/QC results meet all acceptance criteria?	☑ Yes ☐ No
Are QA/QC results and acceptance criteria on file?	☑ Yes ☐ No

For any questions above answered with "No", please provide an explanation: *

Data entered by ENW; proofed by MG.

Table A-2b
Summary of Analytical QA/QC - Fourth Quarter 2014
Groundwater Extraction and Monitoring Wells
The Sherwin-Williams Company, Emeryville, California

Site Name:	**Site Address:**	**Monitoring Period Covered:**
The Sherwin-Williams Facility (EM002616.0014)	1450 Sherwin Avenue Emeryville, California	October 1, 2014 through December 31, 2014

Sampling Performed By: Miljan Draganic and Miguel Gomez
Lab Name: Curtis & Tompkins, Ltd.
Lab Address: 2323 Fifth Street, Berkeley, California 94710
Lab Contact: Tracy Babjar
Lab Telephone Number: (510) 486-0900

Analytical QA/QC Performed By:
Firm Name: ARCADIS U.S., Inc.
Firm Address: 1100 Olive Way, Suite 800, Seattle, WA 98101
Firm Contact: Erica Whiting
Firm Telephone Number: (206) 726-4743

Analytical Method Used: (check applicable methods)

- [x] Arsenic by EPA Method 6010 B
- [ ] Cadmium by EPA Method_____
- [ ] Chromium (total) by EPA Method_____
- [ ] Chromium (hexavalent)
- [ ] Copper by EPA Method_____
- [ ] Lead by EPA Method_____
- [ ] Mercury by EPA Method_____
- [ ] Nickel by EPA Method_____
- [ ] Selenium by EPA Method_____
- [ ] Silver by EPA Method_____
- [ ] Zinc by EPA Method_____
- [ ] Halogenated Volatile Organics by EPA Method 601 or 8010
- [ ] Aromatic and Unsaturated Volatile Organics by EPA 602 or 8020
- [x] Volatile Organics by EPA Method 624 or 8240 or 8260
- [ ] Semivolatile Organics by EPA Method 625 or 8270
- [ ] EDB and DBCP by EPA Method 504
- [ ] TPH gasoline by EPA Method 8260
- [ ] TPH diesel by EPA Method 8015 modified
- [ ] TPH motor oil by EPA Method 8015 modified

Is the lab state-certified for the above analytical method(s)?	[x] Yes [ ] No
Were analyses performed according to standard methods?	[x] Yes [ ] No
Were sample holding times met?	[x] Yes [ ] No
Were all reported analytical results values above MDLs?	[x] Yes [ ] No
Were QA/QC samples (i.e., blanks, field replicates, spikes, and surrogates) analyzed in accordance and consistent with the analytical method?	[x] Yes [ ] No
Did QA/QC results meet all acceptance criteria?	[x] Yes [ ] No
Are QA/QC results and acceptance criteria on file?	[x] Yes [ ] No

Table A-2b
Summary of Analytical QA/QC - Fourth Quarter 2014
Groundwater Extraction and Monitoring Wells
The Sherwin-Williams Company, Emeryville, California

Site Name:	Site Address:	Monitoring Period Covered:
The Sherwin-Williams Facility (EM002616.0014)	1450 Sherwin Avenue Emeryville, California	October 1, 2014 through December 31, 2014

For any questions above answered with "No", please provide an explanation: *

-The analytical laboratory reported that many analytes were detected between the method detection limit and the reporting limit in the method blank for batch 217173; these analytes were not detected in samples at or above the reporting limit; therefore, no corrective actions were necessary.

-Common laboratory contaminant compound acetone, and compounds benzene, toluene, and 2-hexanone were detected in the blank samples listed below. Where compounds were detected in blanks, associated groundwater samples collected may be qualified. In accordance with the Quality Assurance Project Plan (QAPP; LFR 2006), field sample results are considered positive results only if the concentrations in the field sample exceed 10 times the maximum amount detected in their associated blank for common laboratory contaminants, and exceed 5 times the maximum amount detected in their associated blank for other compounds. If the detected concentration in a field sample is less than 5 or 10 times the concentration detected in the blank, then the result was qualified non-detect. Because acetone was detected in the field blank and associated samples in estimated concentrations, groundwater samples associated with the field blanks were qualified as non-detect equal to their respective reporting limits.

-Acetone was detected at a concentration of 0.0011 mg/L in the trip blank sample submitted on October 29, 2014. In accordance with the QAPP, samples collected during the same day may be qualified. Acetone was detected in the primary and duplicate samples from CDM-101, and in the sample from CDM-102. Because the acetone detections in the source and submersible field blank samples were higher than the trip blank sample, these detections of acetone were qualified as described below.

-Acetone, benzene, toluene, and 2-hexanone were detected at a concentration of 0.02 mg/L, an estimated concentration of 0.0001 mg/L, an estimated concentration of 0.0003 mg/L, and an estimated concentration of 0.0006 mg/L, respectively, in the HydraSleeve field blank sample collected from associated monitoring well CDM-102. Acetone, benzene, toluene, and 2-hexanone were also detected at a concentration of 0.021 mg/L, an estimated concentration of 0.0001 mg/L, an estimated concentration of 0.0003 mg/L, and an estimated concentration of 0.0007 mg/L, respectively, in the submersible pump field blank sample. Acetone was detected at estimated concentrations of 0.0006 mg/L and 0.0009 mg/L in the sample collected from CDM-102. Because the acetone result in CDM-102 was less than 10 times the blank concentration, the result was qualified as non-detect with a reporting limit of 0.01 mg/L.

-Acetone, toluene, and 2-hexanone were detected at a concentration of 0.015 mg/L, an estimated concentration of 0.0003 mg/l, and an estimated concentration of 0.0004 mg/L, respectively, in the source blank sample collected on October 29, 2014. In accordance with the QAPP, samples collected within the same batch as the water blank sample may be qualified. Acetone was detected in the primary and duplicate samples from CDM-101 at estimated concentrations of 0.0008 mg/L and 0.0009 mg/L, respectively. Because the acetone results in CDM-101 were less than 10 times the blank concentration, the results were qualified as non-detect with a reporting limit of 0.01 mg/L.

Data entered by ENW; proofed by MG.

ARCADIS

Appendix B

Field Parameters Measured
Post Remedy Implementation

Appendix B-1
Field Parameters Measured During Purging and Sampling, April 2012 through October 2014
The Sherwin-Williams Company
Emeryville, California

Well Number	Date Sampled	Well Volume (gallons)	Approximate Volume Purged (gallons)	pH	Temperature (degrees Celsius)	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)	Turbidity (NTU)	Notes
CDM-101	04/17/12	2.0	6.0	6.17	17.7	2.522	2.03	-68.7	1103.4	
CDM-101	10/19/12	1.8	5.8	6.38	19.7	2.740	3.72	-55.6	1,112.6	
CDM-101	04/22/13	1.9	8.0	6.10	18.7	2.556	2.67	-67.1	86.9	
CDM-101	10/07/13	1.7	6.5	6.22	22.8	3.638	3.27	-41.0	282.1	
CDM-101	04/28/14	1.8	6.0	6.44	21.8	3.453	1.82	-9.5	668.0	
CDM-101	10/29/14	1.7	6.0	6.11	22.9	3.744	2.30	-59.1	45.8	
CDM-102	04/17/12	2.0	6.0	6.05	17.9	4.209	1.81	-56.7	669.8	
CDM-102	10/19/12	1.8	5.5	6.25	20.1	4.354	5.11	-76.8	349.5	
CDM-102	04/22/13	1.8	8.0	6.00	18.9	3.753	2.83	-78.1	46.6	
CDM-102	10/07/13	1.7	6.8	6.20	22.0	3.745	3.33	-65.5	222.2	
CDM-102	04/28/14	1.8	6.0	6.33	23.9	3.961	1.09	-38.1	148.0	
CDM-102	10/29/14	1.7	6.0	5.98	20.6	3.364	2.19	-105.6	22.5	
CDM-103	04/18/12	1.7	5.2	6.57	17.1	4.207	2.21	138.4	306.1	
CDM-103	10/22/12	2.0	6.0	7.39	19.2	4.488	5.35	27.5	1,250.7	
CDM-103	04/24/13	2.0	6.5	6.48	18.2	3.987	2.41	-34.1	17.3	
CDM-103	10/09/13	2.0	6.0	6.29	20.3	4.458	4.09	66.9	410.3	
CDM-103	04/29/14	2.0	6.0	6.69	25.9	4.960	2.28	-6.0	7.7	
CDM-103	10/27/14	1.8	6.0	6.68	21.6	5.505	2.40	13.5	5.2	
CDM-104	04/18/12	1.9	5.6	6.41	16.8	2.126	1.15	125.7	1606.7	
CDM-104	10/22/12	1.8	5.8	7.55	20.3	1.894	3.60	21.2	2,218.2	
CDM-104	04/24/13	1.9	12.0	6.54	17.8	1.759	3.44	1.9	388.0	
CDM-104	10/09/13	1.7	6.0	6.44	22.0	1.947	2.67	51.3	817.0	
CDM-104	04/25/14	1.9	6.0	6.82	17.9	1.664	0.87	-22.0	57.3	
CDM-104	05/13/14	1.8	12.0	7.02	22.9	1.395	1.23	37.3	522.0	
CDM-104	10/30/14	1.7	6.0	6.72	21.9	1.655	1.42	96.3	734.0	
CDM-105	04/18/12	1.7	5.1	6.46	17.7	1.083	0.43	-56.3	711.0	
CDM-105	10/22/12	1.5	4.5	6.58	20.7	1.099	4.68	-109.5	490.2	
CDM-105	04/24/13	1.6	6.0	6.51	16.6	1.011	3.46	-107.1	210.1	
CDM-105	10/07/13	1.4	4.2	6.71	21.8	1.153	8.37	-96.9	138.5	(1)
CDM-105	04/25/14	1.6	4.5	6.56	15.4	1.071	1.35	-49.3	24.9	

Appendix B-1
Field Parameters Measured During Purging and Sampling, April 2012 through October 2014
The Sherwin-Williams Company
Emeryville, California

Well Number	Date Sampled	Well Volume (gallons)	Approximate Volume Purged (gallons)	pH	Temperature (degrees Celsius)	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)	Turbidity (NTU)	Notes
CDM-105	05/13/14	1.6	8.0	6.75	24.7	0.947	1.98	-91.1	171.0	
CDM-105	10/28/14	1.4	4.5	6.53	22.2	1.201	1.08	-96.9	43.5	
CDM-106	04/18/12	1.7	5.2	6.39	17.0	0.906	1.08	-101.6	727.4	
CDM-106	10/22/12	1.5	4.5	6.33	20.9	1.454	4.36	-114.2	866.1	
CDM-106	04/24/13	1.5	5.0	6.35	17.0	1.245	2.91	-105.9	80.2	
CDM-106	10/09/13	1.5	4.5	6.29	21.1	1.168	2.28	-2.0	626.3	
CDM-106	04/25/14	1.6	4.5	6.37	17.6	1.095	1.49	-4.5	63.0	
CDM-106	05/13/14	1.5	4.5	6.87	29.4	0.997	0.94	-49.9	431.0	
CDM-106	10/28/14	1.5	4.5	6.35	23.0	1.085	0.87	-98.6	83.0	
CDM-107	04/18/12	1.4	4.1	6.60	16.9	1.490	0.10	-59.9	856.3	
CDM-107	10/19/12	1.3	4.5	7.15	19.2	1.481	3.90	-117.5	905.5	
CDM-107	04/23/13	1.4	4.5	6.60	17.4	1.236	2.14	-100.1	329.0	
CDM-107	10/07/13	1.3	3.9	6.70	20.1	1.548	7.48	-96.9	264.7	(1)
CDM-107	04/25/14	1.4	4.5	7.47	17.0	1.458	0.44	-129.0	68.5	
CDM-107	05/13/14	1.4	4.2	7.36	22.3	1.324	2.73	-125.4	63.3	
CDM-107	10/29/14	1.3	4.5	6.52	21.7	1.530	2.33	-41.3	30.4	
CDM-108	04/18/12	1.5	4.5	6.69	17.5	1.212	2.27	-127.1	1356.8	
CDM-108	10/19/12	1.5	4.5	7.15	19.5	1.204	3.95	-115.7	1,192.4	
CDM-108	04/24/13	1.5	6.0	6.71	17.3	1.151	3.09	-108.0	364.0	
CDM-108	10/07/13	1.6	5.8	6.79	20.7	1.408	7.49	-91.6	1,083.6	(1)
CDM-108	12/02/13	1.5	6.0	6.74	18.5	1.306	1.85	-91.6	987.0	
CDM-108	01/03/14	1.5	4.5	6.66	19.1	1.224	0.91	-130.2	144.0	
CDM-108	02/12/14	1.6	6.0	6.63	17.7	1.294	1.06	-84.6	348.0	
CDM-108	04/25/14	1.4	6.0	7.20	17.0	1.141	2.00	-185.0	61.3	
CDM-108	05/13/14	1.5	4.5	7.41	22.6	1.363	0.78	-91.0	357.0	
CDM-108	07/08/14	1.5	7.5	7.78	20.5	1.290	0.64	-148.0	124.0	
CDM-108	10/29/14	1.5	4.5	6.60	22.7	1.473	0.79	-116.4	75.8	
CDM-109	04/19/12	1.5	6.0	6.83	17.3	1.655	3.34	-16.4	2329.5	
CDM-109	10/22/12	1.4	4.5	6.83	21.0	1.433	3.09	-7.6	480.6	
CDM-109	04/24/13	1.5	4.5	6.71	16.7	1.549	3.96	107.1	499.1	

Appendix B-1
Field Parameters Measured During Purging and Sampling, April 2012 through October 2014
The Sherwin-Williams Company
Emeryville, California

Well Number	Date Sampled	Well Volume (gallons)	Approximate Volume Purged (gallons)	pH	Temperature (degrees Celsius)	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)	Turbidity (NTU)	Notes
CDM-109	10/09/13	1.4	6.0	6.62	21.6	1.539	2.52	92.6	812.0	
CDM-109	04/25/14	1.5	6.0	6.92	15.6	1.763	2.28	-11.2	35.6	
CDM-109	05/13/14	1.5	4.5	7.28	26.3	1.706	2.19	-13.3	131.0	
CDM-109	10/30/14	1.4	4.5	6.90	22.4	1.668	0.79	-32.7	26.9	
CDM-110	04/18/12	2.3	6.9	6.72	16.5	0.820	3.82	-29.6	521.2	
CDM-110	10/22/12	2.0	10.0	6.75	21.3	0.820	3.01	-135.5	300.3	
CDM-110	04/23/13	2.0	8.0	6.76	18.0	0.672	2.02	-119.1	83.5	
CDM-110	10/08/13	1.9	8.0	6.71	22.7	0.797	1.60	-114.3	204.0	
CDM-110	04/24/14	2.1	6.0	6.80	19.6	0.939	2.50	-47.7	816.0	
CDM-111	04/18/12	2.3	6.9	6.72	16.5	0.983	1.93	-137.1	541.0	
CDM-111	10/22/12	1.9	5.8	7.79	19.7	0.883	2.72	-137.8	1,898.2	
CDM-111	04/23/13	2.0	6.0	6.59	16.6	0.867	2.22	-130.1	349.1	
CDM-111	10/08/13	2.4	7.2	6.71	21.9	1.130	4.10	-91.2	404.2	
CDM-111	04/24/14	2.0	6.0	6.75	19.3	1.021	0.80	-47.2	1,219.0	
CDM-112	04/19/12	2.2	6.6	6.77	17.4	0.636	3.00	133.2	690.1	
CDM-112	04/24/13	2.0	6.0	6.70	17.1	0.550	2.52	-80.6	167.1	
CDM-112	04/29/14	2.1	6.3	6.76	21.4	0.766	1.11	-20.4	867.0	
CDM-113	04/19/12	2.1	6.3	6.71	16.8	1.060	2.67	-88.6	869.9	
CDM-113	04/24/13	2.0	6.0	6.69	16.9	0.936	3.81	-132.1	165.1	
CDM-113	04/24/14	2.0	7.5	6.74	20.2	1.041	0.79	-36.0	2,020.0	
CDM-114	04/18/12	2.4	7.2	6.54	16.9	1.772	3.96	-104.1	340.0	
CDM-114	10/19/12	1.7	6.0	7.09	20.5	1.841	3.70	-140.4	549.0	
CDM-114	04/23/13	2.1	7.5	6.63	15.9	0.976	2.62	-111.1	12.7	
CDM-114	04/24/14	2.2	6.0	7.00	20.9	1.143	1.53	-14.9	20.0	
LF-12	04/18/12	1.6	4.7	6.35	17.6	0.384	4.81	63.8	685.1	
LF-12	04/23/13	1.5	4.5	6.56	18.3	0.295	4.37	61.3	341.0	
LF-12	04/24/14	1.6	6.0	7.30	18.2	0.384	1.09	76.0	82.0	
LF-18	04/16/12	1.8	7.2	6.44	18.0	0.604	5.21	182.0	7.3	
LF-18	04/23/13	1.4	4.5	6.50	18.1	0.662	2.39	-37.1	6.8	
LF-18	04/29/14	1.4	4.5	6.89	23.9	0.839	2.43	-23.0	4.7	

Appendix B-1
Field Parameters Measured During Purging and Sampling, April 2012 through October 2014
The Sherwin-Williams Company
Emeryville, California

Well Number	Date Sampled	Well Volume (gallons)	Approximate Volume Purged (gallons)	pH	Temperature (degrees Celsius)	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)	Turbidity (NTU)	Notes
LF-24	04/16/12	2.2	8.8	6.34	16.5	0.781	3.25	195.8	124.8	
LF-24	04/19/13	2.1	8.5	6.53	16.8	0.580	1.52	14.7	4.0	
LF-24	05/13/14	2.1	6.0	6.94	25.9	0.675	2.01	37.2	35.5	
LF-25	04/16/12	2.1	10.3	6.79	15.5	1.222	4.71	-100.1	49.1	
LF-25	04/19/13	1.9	6.0	7.05	15.9	0.865	3.23	-96.1	11.2	
LF-25	05/13/14	1.9	6.0	7.30	20.1	1.372	2.19	-6.1	235.0	
LF-28	04/18/12	1.9	5.8	6.55	18.6	0.287	1.54	-26.4	65.1	
LF-28	04/23/13	1.8	6.0	6.64	19.6	0.210	3.49	2.4	39.7	
LF-28	04/24/14	1.7	6.0	7.40	18.0	0.284	5.16	-14.1	39.0	
LF-35	04/17/12	3.3	9.9	6.18	20.0	1.832	5.34	-43.6	26.1	
LF-35	10/23/12	2.9	18.0	6.31	20.1	1.616	2.70	-47.3	12.3	
LF-35	04/22/13	3.0	9.0	6.22	20.8	1.271	2.79	-20.1	39.2	
LF-35	04/28/14	3.0	9.0	6.48	25.1	1.483	3.05	9.7	77.7	
LF-36	04/17/12	1.3	4.0	6.57	18.4	0.147	2.87	6.8	846.2	
LF-36	10/23/12	1.1	3.4	7.07	21.0	0.163	3.93	-72.4	774.0	
LF-36	04/22/13	1.2	4.0	6.72	18.4	0.190	2.86	-69.7	12.7	
LF-36	10/08/13	1.0	3.2	6.69	22.8	0.359	3.14	-57.4	308.4	
LF-36	04/29/14	1.3	3.9	6.63	20.9	0.292	1.50	-64.0	99.7	
LF-36	10/31/14	1.0	3.0	6.61	20.5	0.313	1.33	-17.2	64.9	
LF-37	04/17/12	1.6	4.8	6.36	18.9	1.128	3.31	-81.1	75.1	
LF-37	10/23/12	1.2	11.5	6.40	23.2	1.209	2.30	-92.0	49.7	
LF-37	04/22/13	1.3	5.0	6.48	19.5	0.932	2.67	-107.9	10.9	
LF-37	10/07/13	1.1	3.5	6.11	24.1	1.378	2.63	-55.1	557.9	
LF-37	04/23/14	1.2	4.0	6.46	21.7	1.176	0.58	-74.1	97.1	
LF-37	10/28/14	1.1	4.0	6.26	23.8	1.323	0.87	-62.4	90.5	
LF-38	04/17/12	3.2	9.6	5.86	19.9	1.756	2.62	-11.6	11.9	
LF-38	04/22/13	3.0	12.0	6.04	20.1	1.423	4.64	-10.6	4.4	
LF-38	04/23/14	2.9	9.0	6.21	22.9	1.370	0.83	-13.9	41.7	
LF-39	04/17/12	2.9	9.0	5.99	19.8	0.364	5.00	84.4	13.4	
LF-39	04/22/13	2.9	9.0	6.32	20.2	0.347	3.71	60.2	12.6	

Appendix B-1
Field Parameters Measured During Purging and Sampling, April 2012 through October 2014
The Sherwin-Williams Company
Emeryville, California

Well Number	Date Sampled	Well Volume (gallons)	Approximate Volume Purged (gallons)	pH	Temperature (degrees Celsius)	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)	Turbidity (NTU)	Notes
LF-39	04/22/14	2.8	12.0	7.10	20.3	0.451	1.36	23.7	40.0	
LF-40	04/17/12	1.2	3.6	6.18	18.6	0.414	2.17	-41.1	268.9	
LF-40	10/23/12	0.9	3.0	6.30	21.5	0.476	2.80	-78.1	104.7	
LF-40	04/22/13	1.0	3.0	6.39	19.7	0.422	2.71	-37.1	121.2	
LF-40	10/07/13	0.9	4.0	6.36	23.4	0.653	2.74	-61.3	173.0	
LF-40	04/22/14	1.0	4.0	6.33	20.8	0.656	4.25	-53.0	154.0	
LF-40	10/28/14	0.9	4.0	5.94	23.7	0.522	2.21	-7.1	102.0	
LF-41	04/17/12	1.4	4.1	6.63	17.7	0.180	2.60	-31.9	118.6	
LF-41	10/23/12	1.1	4.5	6.68	21.1	0.171	2.36	-69.0	65.0	
LF-41	04/22/13	1.2	4.5	6.64	19.3	0.134	2.29	-39.1	68.1	
LF-41	10/08/13	1.0	3.5	6.67	21.4	0.208	3.15	-36.1	68.2	
LF-41	04/23/14	1.2	4.0	6.51	17.7	0.200	1.34	-37.8	32.3	
LF-41	10/28/14	1.0	3.0	6.34	21.9	0.228	0.76	-44.7	23.7	
LF-42	04/17/12	1.6	4.8	6.25	18.5	1.103	2.43	-67.5	51.4	
LF-42	10/22/12	1.4	6.9	7.39	21.5	0.973	4.60	-104.3	194.0	
LF-42	04/24/13	1.5	4.5	6.32	18.2	0.991	3.45	-118.1	65.1	
LF-42	10/09/13	1.3	3.9	6.27	22.4	1.097	3.08	2.4	151.3	
LF-42	04/25/14	1.5	4.5	6.52	18.1	1.043	1.98	3.8	36.2	
LF-42	05/13/14	1.2	3.6	6.88	22.4	0.915	10.65	-117.2	320.0	
LF-42	10/30/14	1.3	4.5	6.45	22.9	1.019	0.94	-24.3	20.1	
MW-3	04/17/12	2.2	6.6	6.49	17.0	0.197	1.57	-62.9	150.5	
MW-3	07/18/12	2.0	6.0	6.54	20.0	0.211	1.84	-88.6	181.1	
MW-3	10/23/12	2.0	6.0	7.29	19.6	0.224	3.43	-93.2	144.6	
MW-3	01/18/13	2.0	6.0	6.66	18.4	0.302	2.89	-54.5	218.8	
MW-3	04/22/13	2.0	6.0	6.77	20.5	0.174	1.73	-61.2	35.4	
MW-3	07/16/13	1.9	10.0	6.45	21.0	0.238	3.09	-131.3	24.5	
MW-3	10/08/13	1.8	5.4	6.78	21.5	0.239	2.08	-37.6	256.9	
MW-3	01/03/14	1.9	8.0	6.63	19.8	0.258	0.87	-103.6	215.0	
MW-3	4/29/2014	2.0	5.9	6.62	20.0	0.264	1.28	17.7	86.9	
MW-3	10/30/2014	1.8	6.0	6.70	20.9	0.264	1.26	-18.7	40.8	

Appendix B-1
Field Parameters Measured During Purging and Sampling, April 2012 through October 2014
The Sherwin-Williams Company
Emeryville, California

Well Number	Date Sampled	Well Volume (gallons)	Approximate Volume Purged (gallons)	pH	Temperature (degrees Celsius)	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)	Turbidity (NTU)	Notes
RP-1	04/17/12	1.0	3.0	6.12	18.2	0.415	3.62	-12.8	105.5	
RP-1	07/18/12	0.7	2.8	6.22	21.3	0.366	1.87	-76.4	230.8	
RP-1	10/23/12	0.7	2.1	7.23	21.8	0.384	4.09	-88.9	188.9	
RP-1	01/18/13	0.8	3.0	6.32	19.6	0.504	3.31	-6.0	34.5	
RP-1	04/22/13	0.8	2.3	6.41	19.6	0.362	2.82	-72.9	33.2	
RP-1	07/16/13	0.6	2.0	6.22	21.6	0.404	4.33	-105.4	13.9	
RP-1	10/07/13	0.7	2.9	6.31	23.5	0.423	2.93	-84.6	30.6	
RP-1	01/03/14	0.6	3.0	6.29	20.7	0.407	0.67	-108.7	18.1	
RP-1	04/23/14	0.7	4.0	6.37	20.0	0.451	1.05	-12.4	79.9	
RP-1	10/31/14	0.6	1.5	6.40	21.3	0.429	1.02	-62.8	219.0	
RP-2	04/17/12	1.3	3.8	6.54	18.8	0.364	1.08	-73.0	76.6	
RP-2	10/23/12	1.1	3.2	6.95	21.3	0.315	4.15	-87.1	229.1	
RP-2	04/19/13	1.1	4.5	6.57	18.5	0.238	1.65	-95.1	40.2	
RP-2	10/08/13	1.0	4.5	6.69	21.7	0.317	3.26	-44.0	314.4	
RP-2	04/23/14	1.1	4.0	6.60	21.5	0.339	3.57	-31.3	82.3	
RP-2	10/30/14	1.0	3.0	6.51	23.0	0.297	1.02	-15.5	144.0	
RP-3	04/17/12	1.0	5.0	6.15	18.4	1.325	4.48	-39.0	101.9	
RP-3	12/20/12	1.0	3.0	6.38	21.0	1.499	1.30	-10.8	424.2	
RP-3	04/19/13	0.9	3.0	6.09	18.7	1.476	2.71	-33.1	52.1	
RP-3	10/08/13	0.9	4.0	6.34	23.6	1.972	2.19	26.3	94.2	
RP-3	04/28/14	0.9	5.0	6.38	22.1	1.070	3.37	-21.0	121.0	
RP-3	10/28/14	0.7	5.0	6.07	24.1	2.394	1.43	-17.5	227.0	
RP-4	04/17/12	1.7	6.7	6.65	19.5	0.186	6.33	-21.9	27.9	
RP-4	07/18/12	1.5	4.5	6.29	21.7	0.171	2.11	31.1	112.5	
RP-4	10/23/12	1.5	4.5	6.78	21.2	0.187	4.70	-15.5	324.7	
RP-4	01/18/13	1.5	5.0	6.67	20.7	0.206	3.59	29.5	188.6	
RP-4	04/19/13	1.5	5.0	6.54	20.5	0.167	2.33	17.1	16.2	
RP-4	07/16/13	1.4	6.0	6.31	21.5	0.212	3.63	-84.3	19.8	
RP-4	10/08/13	1.3	6.0	6.36	22.9	0.266	2.86	16.8	85.4	
RP-4	01/03/14	1.8	8.0	6.34	21.5	0.277	1.33	-24.1	6.28	

Appendix B-1
Field Parameters Measured During Purging and Sampling, April 2012 through October 2014
The Sherwin-Williams Company
Emeryville, California

Well Number	Date Sampled	Well Volume (gallons)	Approximate Volume Purged (gallons)	pH	Temperature (degrees Celsius)	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)	Turbidity (NTU)	Notes
RP-4	4/29/2014	1.5	4.5	6.43	22.1	0.408	1.31	-19.0	60.9	
RP-4	10/30/2014	1.4	4.5	6.32	22.1	0.286	1.30	23.2	74.8	
RP-5	04/17/12	1.5	4.5	6.34	19.3	0.325	4.06	31.8	51.0	
RP-5	10/23/12	1.2	3.5	6.74	21.7	0.286	3.87	-79.9	393.7	
RP-5	04/19/13	1.3	4.0	6.42	20.7	0.230	2.18	-45.6	56.4	
RP-5	10/08/13	1.0	3.3	6.31	23.6	0.301	3.98	-22.5	115.6	
RP-5	04/29/14	1.2	3.60	6.49	22.0	0.382	0.90	-19.2	55.0	
RP-5	10/30/14	1.1	4.00	6.37	24.0	0.336	0.62	-31.9	54.9	

Data entered by MD. Proofed by ENW.

Notes:
mS/cm = milliSiemens per centimeter
mg/L = milligrams per liter
mV = milliVolts
NTU = nephelometric turbidity units
(1) = dissolved oxygen probe malfunctioning

ARCADIS

Appendix C

Complete Analytical Results for Reporting Period

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
CDM-108	07/08/14	Metals (SW6010AS)	**ARSENIC**	**220**		5	ug/L	30-36-108-070814
CDM-108-DUP	07/08/14	Metals (SW6010AS)	**ARSENIC**	**230**		5	ug/L	30-36-108-070814-D
CDM-103	10/27/14	Metals (SW6010AS)	ARSENIC	< 5	U	5	ug/L	50-36-103-102714
CDM-103-DUP	10/27/14	Metals (SW6010AS)	ARSENIC	< 5	U	5	ug/L	50-36-103-102714-D
CDM-105	10/28/14	Metals (SW6010AS)	**ARSENIC**	**60**		5	ug/L	50-36-105-102814
CDM-106	10/28/14	Metals (SW6010AS)	**ARSENIC**	**1800**		5	ug/L	50-36-106-102814
LF-37	10/28/14	Metals (SW6010AS)	**ARSENIC**	**6.9**		5	ug/L	40-36-037-102814
LF-40	10/28/14	Metals (SW6010AS)	**ARSENIC**	**9.3**		5	ug/L	40-36-040-102814
LF-41	10/28/14	Metals (SW6010AS)	**ARSENIC**	**69**		5	ug/L	40-36-041-102814
RP-3	10/28/14	Metals (SW6010AS)	**ARSENIC**	**5.7**		5	ug/L	40-36-003-102814
LF-41-DUP	10/28/14	Metals (SW6010AS)	**ARSENIC**	**69**		5	ug/L	40-36-041-102814-D
CDM-101	10/29/14	(SW8260B)	1,1,1,2-TETRACHLOROETHANE	< 0.5	U	0.5	ug/L	40-36-101-102914
			1,1,1-TRICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1,2,2-TETRACHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1,2-TRICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROETHENE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,2,4-TRICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2,4-TRIMETHYLBENZENE	< 0.5	U	0.5	ug/L	
			1,2-DIBROMO-3-CHLOROPROPANE	< 2	U	2	ug/L	
			1,2-DIBROMOETHANE	< 0.5	U	0.5	ug/L	
			1,2-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2-DICHLOROETHANE	**0.8**		0.5	ug/L	
			1,2-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
CDM-101	10/29/14	(SW8260B)	1,3,5-TRIMETHYLBENZENE	< 0.5	U	0.5	ug/L	40-36-101-102914
			1,3-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,3-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,4-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			2,2-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			2-BUTANONE	< 10	U	10	ug/L	
			2-CHLOROTOLUENE	< 0.5	U	0.5	ug/L	
			2-HEXANONE	< 10	U	10	ug/L	
			4-CHLOROTOLUENE	< 0.5	U	0.5	ug/L	
			4-ISOPROPYL TOLUENE	< 0.5	U	0.5	ug/L	
			4-METHYL-2-PENTANONE (MIBK)	< 10	U	10	ug/L	
			ACETONE	< 0.01	U12	10	ug/L	
			BENZENE	**0.2**	**J**	0.5	ug/L	
			BROMOBENZENE	< 0.5	U	0.5	ug/L	
			BROMOCHLOROMETHANE	< 0.5	U	0.5	ug/L	
			BROMODICHLOROMETHANE	< 0.5	U	0.5	ug/L	
			BROMOFORM	< 1	U	1	ug/L	
			BROMOMETHANE	< 1	U	1	ug/L	
			BROMOMETHANE (METHYL BROMIDE)	< 1	U	1	ug/L	
			CARBON DISULFIDE	< 0.5	U	0.5	ug/L	
			CARBON TETRACHLORIDE	< 0.5	U	0.5	ug/L	
			CHLOROBENZENE	< 0.5	U	0.5	ug/L	
			CHLOROETHANE	< 1	U	1	ug/L	
			CHLOROFORM	< 0.5	U	0.5	ug/L	
			CHLOROMETHANE	< 1	U	1	ug/L	
			CIS-1,2-DICHLOROETHENE	**0.7**		0.5	ug/L	
			CIS-1,3-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	
			DIBROMOCHLOROMETHANE	< 0.5	U	0.5	ug/L	
			DIBROMOMETHANE	< 0.5	U	0.5	ug/L	
			ETHYLBENZENE	< 0.5	U	0.5	ug/L	
			FREON 113	< 2	U	2	ug/L	
			FREON 12	< 1	U	1	ug/L	
			HEXACHLOROBUTADIENE	< 2	U	2	ug/L	
			ISOPROPYLBENZENE	< 0.5	U	0.5	ug/L	
			M,P-XYLENES	< 0.5	U	0.5	ug/L	
			M-DICHLORBENZENE	< 0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
CDM-101	10/29/14	(SW8260B)	METHYLENE CHLORIDE	< 10	U	10	ug/L	40-36-101-102914
			MTBE	**0.8**		0.5	ug/L	
			N-BUTYLBENZENE	< 0.5	U	0.5	ug/L	
			N-PROPYLBENZENE	< 0.5	U	0.5	ug/L	
			NAPHTHALENE	< 2	U	2	ug/L	
			O-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			O-XYLENE	< 0.5	U	0.5	ug/L	
			P-CYMENE	< 0.5	U	0.5	ug/L	
			P-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			PARA-ISOPROPYL TOLUENE	< 0.5	U	0.5	ug/L	
			PROPYLBENZENE	< 0.5	U	0.5	ug/L	
			SEC-BUTYLBENZENE	< 0.5	U	0.5	ug/L	
			STYRENE	< 0.5	U	0.5	ug/L	
			TERT-BUTYLBENZENE	< 0.5	U	0.5	ug/L	
			TETRACHLOROETHENE	< 0.5	U	0.5	ug/L	
			TOLUENE	< 0.5	U	0.5	ug/L	
			TRANS-1,2-DICHLOROETHENE	< 0.5	U	0.5	ug/L	
			TRANS-1,3-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	
			TRICHLOROETHENE	< 0.5	U	0.5	ug/L	
			TRICHLOROFLUOROMETHANE	< 1	U	1	ug/L	
			VINYL ACETATE	< 10	U	10	ug/L	
			VINYL CHLORIDE	< 0.5	U	0.5	ug/L	
			XYLENES (TOTAL)	< 1	U	0.5	ug/L	
		Metals (SW6010AS)	**ARSENIC**	**49**		5	ug/L	
CDM-102	10/29/14	(SW8260B)	1,1,1,2-TETRACHLOROETHANE	< 0.5	U	0.5	ug/L	40-36-102-102914
			1,1,1-TRICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1,2,2-TETRACHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1,2-TRICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROETHANE	**0.2**	**J**	0.5	ug/L	
			1,1-DICHLOROETHENE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,2,4-TRICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2,4-TRIMETHYLBENZENE	< 0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
CDM-102	10/29/14	(SW8260B)	1,2-DIBROMO-3-CHLOROPROPANE	< 2	U	2	ug/L	40-36-102-102914
			1,2-DIBROMOETHANE	< 0.5	U	0.5	ug/L	
			1,2-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2-DICHLOROETHANE	**1.1**		0.5	ug/L	
			1,2-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,3,5-TRIMETHYLBENZENE	< 0.5	U	0.5	ug/L	
			1,3-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,3-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,4-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			2,2-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			2-BUTANONE	< 10	U	10	ug/L	
			2-CHLOROTOLUENE	< 0.5	U	0.5	ug/L	
			2-HEXANONE	< 10	U	10	ug/L	
			4-CHLOROTOLUENE	< 0.5	U	0.5	ug/L	
			4-ISOPROPYL TOLUENE	< 0.5	U	0.5	ug/L	
			4-METHYL-2-PENTANONE (MIBK)	< 10	U	10	ug/L	
			ACETONE	< 0.01	U5	10	ug/L	
			BENZENE	< 0.5	U	0.5	ug/L	
			BROMOBENZENE	< 0.5	U	0.5	ug/L	
			BROMOCHLOROMETHANE	< 0.5	U	0.5	ug/L	
			BROMODICHLOROMETHANE	< 0.5	U	0.5	ug/L	
			BROMOFORM	< 1	U	1	ug/L	
			BROMOMETHANE	< 1	U	1	ug/L	
			BROMOMETHANE (METHYL BROMIDE)	< 1	U	1	ug/L	
			CARBON DISULFIDE	< 0.5	U	0.5	ug/L	
			CARBON TETRACHLORIDE	< 0.5	U	0.5	ug/L	
			CHLOROBENZENE	< 0.5	U	0.5	ug/L	
			CHLOROETHANE	< 1	U	1	ug/L	
			CHLOROFORM	< 0.5	U	0.5	ug/L	
			CHLOROMETHANE	< 1	U	1	ug/L	
			CIS-1,2-DICHLOROETHENE	**1.6**		0.5	ug/L	
			CIS-1,3-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	
			DIBROMOCHLOROMETHANE	< 0.5	U	0.5	ug/L	
			DIBROMOMETHANE	< 0.5	U	0.5	ug/L	
			ETHYLBENZENE	< 0.5	U	0.5	ug/L	
			FREON 113	< 2	U	2	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
CDM-102	10/29/14	(SW8260B)	FREON 12	< 1	U	1	ug/L	40-36-102-102914
			HEXACHLOROBUTADIENE	< 2	U	2	ug/L	
			ISOPROPYLBENZENE	< 0.5	U	0.5	ug/L	
			M,P-XYLENES	< 0.5	U	0.5	ug/L	
			M-DICHLORBENZENE	< 0.5	U	0.5	ug/L	
			METHYLENE CHLORIDE	< 10	U	10	ug/L	
			MTBE	**0.5**	**J**	0.5	ug/L	
			N-BUTYLBENZENE	< 0.5	U	0.5	ug/L	
			N-PROPYLBENZENE	< 0.5	U	0.5	ug/L	
			NAPHTHALENE	< 2	U	2	ug/L	
			O-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			O-XYLENE	< 0.5	U	0.5	ug/L	
			P-CYMENE	< 0.5	U	0.5	ug/L	
			P-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			PARA-ISOPROPYL TOLUENE	< 0.5	U	0.5	ug/L	
			PROPYLBENZENE	< 0.5	U	0.5	ug/L	
			SEC-BUTYLBENZENE	< 0.5	U	0.5	ug/L	
			STYRENE	< 0.5	U	0.5	ug/L	
			TERT-BUTYLBENZENE	< 0.5	U	0.5	ug/L	
			TETRACHLOROETHENE	< 0.5	U	0.5	ug/L	
			TOLUENE	< 0.5	U	0.5	ug/L	
			TRANS-1,2-DICHLOROETHENE	< 0.5	U	0.5	ug/L	
			TRANS-1,3-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	
			TRICHLOROETHENE	< 0.5	U	0.5	ug/L	
			TRICHLOROFLUOROMETHANE	< 1	U	1	ug/L	
			VINYL ACETATE	< 10	U	10	ug/L	
			VINYL CHLORIDE	< 0.5	U	0.5	ug/L	
			XYLENES (TOTAL)	< 1	U	0.5	ug/L	
		Metals (SW6010AS)	**ARSENIC**	**7.6**		5	ug/L	
CDM-107	10/29/14	(SW8260B)	1,1,1,2-TETRACHLOROETHANE	< 0.5	U	0.5	ug/L	30-36-107-102914
			1,1,1-TRICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1,2,2-TETRACHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1,2-TRICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROETHENE	< 0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
CDM-107	10/29/14	(SW8260B)	1,1-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	30-36-107-102914
			1,2,3-TRICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,2,4-TRICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2,4-TRIMETHYLBENZENE	< 0.5	U	0.5	ug/L	
			1,2-DIBROMO-3-CHLOROPROPANE	< 2	U	2	ug/L	
			1,2-DIBROMOETHANE	< 0.5	U	0.5	ug/L	
			1,2-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2-DICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,2-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,3,5-TRIMETHYLBENZENE	< 0.5	U	0.5	ug/L	
			1,3-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,3-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,4-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			2,2-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			2-BUTANONE	< 10	U	10	ug/L	
			2-CHLOROTOLUENE	< 0.5	U	0.5	ug/L	
			2-HEXANONE	< 10	U	10	ug/L	
			4-CHLOROTOLUENE	< 0.5	U	0.5	ug/L	
			4-ISOPROPYL TOLUENE	< 0.5	U	0.5	ug/L	
			4-METHYL-2-PENTANONE (MIBK)	< 10	U	10	ug/L	
			ACETONE	< 10	U	10	ug/L	
			BENZENE	< 0.5	U	0.5	ug/L	
			BROMOBENZENE	< 0.5	U	0.5	ug/L	
			BROMOCHLOROMETHANE	< 0.5	U	0.5	ug/L	
			BROMODICHLOROMETHANE	< 0.5	U	0.5	ug/L	
			BROMOFORM	< 1	U	1	ug/L	
			BROMOMETHANE	< 1	U	1	ug/L	
			BROMOMETHANE (METHYL BROMIDE)	< 1	U	1	ug/L	
			CARBON DISULFIDE	< 0.5	U	0.5	ug/L	
			CARBON TETRACHLORIDE	< 0.5	U	0.5	ug/L	
			CHLOROBENZENE	**0.1**	**J**	0.5	ug/L	
			CHLOROETHANE	< 1	U	1	ug/L	
			CHLOROFORM	< 0.5	U	0.5	ug/L	
			CHLOROMETHANE	< 1	U	1	ug/L	
			CIS-1,2-DICHLOROETHENE	< 0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
CDM-107	10/29/14	(SW8260B)	CIS-1,3-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	30-36-107-102914
			DIBROMOCHLOROMETHANE	< 0.5	U	0.5	ug/L	
			DIBROMOMETHANE	< 0.5	U	0.5	ug/L	
			ETHYLBENZENE	< 0.5	U	0.5	ug/L	
			FREON 113	< 2	U	2	ug/L	
			FREON 12	< 1	U	1	ug/L	
			HEXACHLOROBUTADIENE	< 2	U	2	ug/L	
			ISOPROPYLBENZENE	< 0.5	U	0.5	ug/L	
			M,P-XYLENES	< 0.5	U	0.5	ug/L	
			M-DICHLORBENZENE	< 0.5	U	0.5	ug/L	
			METHYLENE CHLORIDE	< 10	U	10	ug/L	
			MTBE	**0.5**	**J**	0.5	ug/L	
			N-BUTYLBENZENE	< 0.5	U	0.5	ug/L	
			N-PROPYLBENZENE	< 0.5	U	0.5	ug/L	
			NAPHTHALENE	< 2	U	2	ug/L	
			O-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			O-XYLENE	< 0.5	U	0.5	ug/L	
			P-CYMENE	< 0.5	U	0.5	ug/L	
			P-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			PARA-ISOPROPYL TOLUENE	< 0.5	U	0.5	ug/L	
			PROPYLBENZENE	< 0.5	U	0.5	ug/L	
			SEC-BUTYLBENZENE	< 0.5	U	0.5	ug/L	
			STYRENE	< 0.5	U	0.5	ug/L	
			TERT-BUTYLBENZENE	< 0.5	U	0.5	ug/L	
			TETRACHLOROETHENE	< 0.5	U	0.5	ug/L	
			TOLUENE	< 0.5	U	0.5	ug/L	
			TRANS-1,2-DICHLOROETHENE	< 0.5	U	0.5	ug/L	
			TRANS-1,3-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	
			TRICHLOROETHENE	< 0.5	U	0.5	ug/L	
			TRICHLOROFLUOROMETHANE	< 1	U	1	ug/L	
			VINYL ACETATE	< 10	U	10	ug/L	
			VINYL CHLORIDE	< 0.5	U	0.5	ug/L	
			XYLENES (TOTAL)	< 1	U	0.5	ug/L	
		Metals (SW6010AS)	**ARSENIC**	**9.8**		5	ug/L	
CDM-108	10/29/14	(SW8260B)	1,1,1,2-TETRACHLOROETHANE	< 0.5	U	0.5	ug/L	30-36-108-102914

Notes: All notes are listed at the end of this table - see last page.

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
CDM-108	10/29/14	(SW8260B)	1,1,1-TRICHLOROETHANE	< 0.5	U	0.5	ug/L	30-36-108-102914
			1,1,2,2-TETRACHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1,2-TRICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROETHENE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,2,4-TRICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2,4-TRIMETHYLBENZENE	< 0.5	U	0.5	ug/L	
			1,2-DIBROMO-3-CHLOROPROPANE	< 2	U	2	ug/L	
			1,2-DIBROMOETHANE	< 0.5	U	0.5	ug/L	
			1,2-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2-DICHLOROETHANE	**0.2**	**J**	0.5	ug/L	
			1,2-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,3,5-TRIMETHYLBENZENE	< 0.5	U	0.5	ug/L	
			1,3-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,3-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,4-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			2,2-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			2-BUTANONE	< 10	U	10	ug/L	
			2-CHLOROTOLUENE	< 0.5	U	0.5	ug/L	
			2-HEXANONE	< 10	U	10	ug/L	
			4-CHLOROTOLUENE	< 0.5	U	0.5	ug/L	
			4-ISOPROPYL TOLUENE	< 0.5	U	0.5	ug/L	
			4-METHYL-2-PENTANONE (MIBK)	< 10	U	10	ug/L	
			ACETONE	< 10	U	10	ug/L	
			BENZENE	< 0.5	U	0.5	ug/L	
			BROMOBENZENE	< 0.5	U	0.5	ug/L	
			BROMOCHLOROMETHANE	< 0.5	U	0.5	ug/L	
			BROMODICHLOROMETHANE	< 0.5	U	0.5	ug/L	
			BROMOFORM	< 1	U	1	ug/L	
			BROMOMETHANE	< 1	U	1	ug/L	
			BROMOMETHANE (METHYL BROMIDE)	< 1	U	1	ug/L	
			CARBON DISULFIDE	< 0.5	U	0.5	ug/L	
			CARBON TETRACHLORIDE	< 0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
CDM-108	10/29/14	(SW8260B)	**CHLOROBENZENE**	**0.2**	J	0.5	ug/L	30-36-108-102914
			CHLOROETHANE	<1	U	1	ug/L	
			CHLOROFORM	<0.5	U	0.5	ug/L	
			CHLOROMETHANE	<1	U	1	ug/L	
			CIS-1,2-DICHLOROETHENE	**0.3**	J	0.5	ug/L	
			CIS-1,3-DICHLOROPROPENE	<0.5	U	0.5	ug/L	
			DIBROMOCHLOROMETHANE	<0.5	U	0.5	ug/L	
			DIBROMOMETHANE	<0.5	U	0.5	ug/L	
			ETHYLBENZENE	<0.5	U	0.5	ug/L	
			FREON 113	<2	U	2	ug/L	
			FREON 12	<1	U	1	ug/L	
			HEXACHLOROBUTADIENE	<2	U	2	ug/L	
			ISOPROPYLBENZENE	<0.5	U	0.5	ug/L	
			M,P-XYLENES	<0.5	U	0.5	ug/L	
			M-DICHLORBENZENE	<0.5	U	0.5	ug/L	
			METHYLENE CHLORIDE	<10	U	10	ug/L	
			MTBE	**0.3**	J	0.5	ug/L	
			N-BUTYLBENZENE	<0.5	U	0.5	ug/L	
			N-PROPYLBENZENE	<0.5	U	0.5	ug/L	
			NAPHTHALENE	<2	U	2	ug/L	
			O-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			O-XYLENE	<0.5	U	0.5	ug/L	
			P-CYMENE	<0.5	U	0.5	ug/L	
			P-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			PARA-ISOPROPYL TOLUENE	<0.5	U	0.5	ug/L	
			PROPYLBENZENE	<0.5	U	0.5	ug/L	
			SEC-BUTYLBENZENE	<0.5	U	0.5	ug/L	
			STYRENE	<0.5	U	0.5	ug/L	
			TERT-BUTYLBENZENE	**0.2**	J	0.5	ug/L	
			TETRACHLOROETHENE	<0.5	U	0.5	ug/L	
			TOLUENE	<0.5	U	0.5	ug/L	
			TRANS-1,2-DICHLOROETHENE	<0.5	U	0.5	ug/L	
			TRANS-1,3-DICHLOROPROPENE	<0.5	U	0.5	ug/L	
			TRICHLOROETHENE	<0.5	U	0.5	ug/L	
			TRICHLOROFLUOROMETHANE	<1	U	1	ug/L	
			VINYL ACETATE	<10	U	10	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
CDM-108	10/29/14	(SW8260B)	VINYL CHLORIDE	< 0.5	U	0.5	ug/L	30-36-108-102914
			XYLENES (TOTAL)	< 1	U	0.5	ug/L	
		Metals (SW6010AS)	**ARSENIC**	**170**		5	ug/L	
CDM-101-DUP	10/29/14	(SW8260B)	1,1,1,2-TETRACHLOROETHANE	< 0.5	U	0.5	ug/L	40-36-101-102914-D
			1,1,1-TRICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1,2,2-TETRACHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1,2-TRICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROETHANE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROETHENE	< 0.5	U	0.5	ug/L	
			1,1-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,2,4-TRICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2,4-TRIMETHYLBENZENE	< 0.5	U	0.5	ug/L	
			1,2-DIBROMO-3-CHLOROPROPANE	< 2	U	2	ug/L	
			1,2-DIBROMOETHANE	< 0.5	U	0.5	ug/L	
			1,2-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,2-DICHLOROETHANE	**0.8**		0.5	ug/L	
			1,2-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,3,5-TRIMETHYLBENZENE	< 0.5	U	0.5	ug/L	
			1,3-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			1,3-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			1,4-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			2,2-DICHLOROPROPANE	< 0.5	U	0.5	ug/L	
			2-BUTANONE	< 10	U	10	ug/L	
			2-CHLOROTOLUENE	< 0.5	U	0.5	ug/L	
			2-HEXANONE	< 10	U	10	ug/L	
			4-CHLOROTOLUENE	< 0.5	U	0.5	ug/L	
			4-ISOPROPYL TOLUENE	< 0.5	U	0.5	ug/L	
			4-METHYL-2-PENTANONE (MIBK)	< 10	U	10	ug/L	
			ACETONE	< 0.01	U12	10	ug/L	
			BENZENE	**0.2**	**J**	0.5	ug/L	
			BROMOBENZENE	< 0.5	U	0.5	ug/L	
			BROMOCHLOROMETHANE	< 0.5	U	0.5	ug/L	
			BROMODICHLOROMETHANE	< 0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
CDM-101-DUP	10/29/14	(SW8260B)	BROMOFORM	< 1	U	1	ug/L	40-36-101-102914-D
			BROMOMETHANE	< 1	U	1	ug/L	
			BROMOMETHANE (METHYL BROMIDE)	< 1	U	1	ug/L	
			CARBON DISULFIDE	< 0.5	U	0.5	ug/L	
			CARBON TETRACHLORIDE	< 0.5	U	0.5	ug/L	
			CHLOROBENZENE	< 0.5	U	0.5	ug/L	
			CHLOROETHANE	< 1	U	1	ug/L	
			CHLOROFORM	< 0.5	U	0.5	ug/L	
			CHLOROMETHANE	< 1	U	1	ug/L	
			CIS-1,2-DICHLOROETHENE	**0.7**		0.5	ug/L	
			CIS-1,3-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	
			DIBROMOCHLOROMETHANE	< 0.5	U	0.5	ug/L	
			DIBROMOMETHANE	< 0.5	U	0.5	ug/L	
			ETHYLBENZENE	< 0.5	U	0.5	ug/L	
			FREON 113	< 2	U	2	ug/L	
			FREON 12	< 1	U	1	ug/L	
			HEXACHLOROBUTADIENE	< 2	U	2	ug/L	
			ISOPROPYLBENZENE	< 0.5	U	0.5	ug/L	
			M,P-XYLENES	< 0.5	U	0.5	ug/L	
			M-DICHLORBENZENE	< 0.5	U	0.5	ug/L	
			METHYLENE CHLORIDE	< 10	U	10	ug/L	
			MTBE	**0.8**		0.5	ug/L	
			N-BUTYLBENZENE	< 0.5	U	0.5	ug/L	
			N-PROPYLBENZENE	< 0.5	U	0.5	ug/L	
			NAPHTHALENE	< 2	U	2	ug/L	
			O-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			O-XYLENE	< 0.5	U	0.5	ug/L	
			P-CYMENE	< 0.5	U	0.5	ug/L	
			P-DICHLOROBENZENE	< 0.5	U	0.5	ug/L	
			PARA-ISOPROPYL TOLUENE	< 0.5	U	0.5	ug/L	
			PROPYLBENZENE	< 0.5	U	0.5	ug/L	
			SEC-BUTYLBENZENE	< 0.5	U	0.5	ug/L	
			STYRENE	< 0.5	U	0.5	ug/L	
			TERT-BUTYLBENZENE	< 0.5	U	0.5	ug/L	
			TETRACHLOROETHENE	< 0.5	U	0.5	ug/L	
			TOLUENE	< 0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
CDM-101-DUP	10/29/14	(SW8260B)	TRANS-1,2-DICHLOROETHENE	< 0.5	U	0.5	ug/L	40-36-101-102914-D
			TRANS-1,3-DICHLOROPROPENE	< 0.5	U	0.5	ug/L	
			TRICHLOROETHENE	< 0.5	U	0.5	ug/L	
			TRICHLOROFLUOROMETHANE	< 1	U	1	ug/L	
			VINYL ACETATE	< 10	U	10	ug/L	
			VINYL CHLORIDE	< 0.5	U	0.5	ug/L	
			XYLENES (TOTAL)	< 1	U	0.5	ug/L	
		Metals (SW6010AS)	**ARSENIC**	**50**		5	ug/L	
CDM-104	10/30/14	Metals (SW6010AS)	ARSENIC	< 5	U	5	ug/L	50-36-104-103014
CDM-109	10/30/14	Metals (SW6010AS)	**ARSENIC**	**250**		5	ug/L	30-36-109-103014
LF-42	10/30/14	Metals (SW6010AS)	ARSENIC	< 5	U	5	ug/L	40-36-042-103014
MW-3	10/30/14	Metals (SW6010AS)	**ARSENIC**	**74**		5	ug/L	10-36-003-103014
RP-2	10/30/14	Metals (SW6010AS)	**ARSENIC**	**45**		5	ug/L	40-36-002-103014
RP-4	10/30/14	Metals (SW6010AS)	**ARSENIC**	**6.1**		5	ug/L	40-36-004R-103014
RP-5	10/30/14	Metals (SW6010AS)	**ARSENIC**	**12**		5	ug/L	40-36-005R-103014
LF-42-DUP	10/30/14	Metals (SW6010AS)	ARSENIC	< 5	U	5	ug/L	40-36-042-103014-D
LF-36	10/31/14	Metals (SW6010AS)	**ARSENIC**	**39**		5	ug/L	40-36-036-103114
RP-1	10/31/14	Metals (SW6010AS)	**ARSENIC**	**80**		5	ug/L	40-36-001-103114
LF-36-DUP	10/31/14	Metals (SW6010AS)	**ARSENIC**	**35**		5	ug/L	40-36-036-103114-D

Notes: All notes are listed at the end of this table - see last page.

Table C-1
Complete Analytical Results for Groundwater Monitoring Wells, July and October
(Third and Fourth Quarter 2014 Monitoring)
The Sherwin-Williams Company
Emeryville, California

Well Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID

Notes:

< = Analyte was not detected at or greater than the detection limit reported
ug/L = micrograms per liter

Abbreviations:
DUP = Duplicate sample (field duplicate)

Data Qualifiers:
U = Not detected at or greater than the detection limit reported
J = Concentration is estimated
U5 = Qualified as nondetect (U) based on field blank contamination evaluation.
U12 = Quantified as nondetect (U) based on source water contamination evaluation.

Table C-2

Complete Analytical Results for Field QC (Field and Trip Blanks and Source Water)
Third and Fourth Quarter 2014 Monitoring
The Sherwin-Williams Company
Emeryville, California

Sample Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
FIELD BLANK	07/08/14	Metals (SW6010AS)	ARSENIC	<5	U	5	ug/L	991A-070814
			ARSENIC	<5	U	5	ug/L	991B-070814
			ARSENIC, INORGANIC	<5	U	5	ug/L	
			ARSENIC, INORGANIC	<5	U	5	ug/L	991A-070814
			ARSENIC, SPLP	<5	U	5	ug/L	991B-070814
			ARSENIC, SPLP	<5	U	5	ug/L	991A-070814
	10/27/14		ARSENIC	<5	U	5	ug/L	991A-102714
			ARSENIC	<5	U	5	ug/L	991B-102714
			ARSENIC, INORGANIC	<5	U	5	ug/L	991A-102714
			ARSENIC, INORGANIC	<5	U	5	ug/L	991B-102714
			ARSENIC, SPLP	<5	U	5	ug/L	
			ARSENIC, SPLP	<5	U	5	ug/L	991A-102714
	10/28/14		ARSENIC	<5	U	5	ug/L	991A-102814
			ARSENIC	<5	U	5	ug/L	991B-102814
			ARSENIC, INORGANIC	<5	U	5	ug/L	991A-102814
			ARSENIC, INORGANIC	<5	U	5	ug/L	991B-102814
			ARSENIC, SPLP	<5	U	5	ug/L	991A-102814
			ARSENIC, SPLP	<5	U	5	ug/L	991B-102814
	10/29/14	(SW8260B)	1,1,1,2-TETRACHLOROETHANE	<0.5	U	0.5	ug/L	991B-102914
			1,1,1,2-TETRACHLOROETHANE	<0.5	U	0.5	ug/L	991A-102914
			1,1,1-TRICHLOROETHANE	<0.5	U	0.5	ug/L	991B-102914
			1,1,1-TRICHLOROETHANE	<0.5	U	0.5	ug/L	991A-102914
			1,1,2,2-TETRACHLOROETHANE	<0.5	U	0.5	ug/L	991B-102914
			1,1,2,2-TETRACHLOROETHANE	<0.5	U	0.5	ug/L	991A-102914
			1,1,2-TRICHLOROETHANE	<0.5	U	0.5	ug/L	991B-102914
			1,1,2-TRICHLOROETHANE	<0.5	U	0.5	ug/L	991A-102914
			1,1-DICHLOROETHANE	<0.5	U	0.5	ug/L	
			1,1-DICHLOROETHANE	<0.5	U	0.5	ug/L	991B-102914
			1,1-DICHLOROETHENE	<0.5	U	0.5	ug/L	
			1,1-DICHLOROETHENE	<0.5	U	0.5	ug/L	991A-102914
			1,1-DICHLOROPROPENE	<0.5	U	0.5	ug/L	991B-102914
			1,1-DICHLOROPROPENE	<0.5	U	0.5	ug/L	991A-102914
			1,2,3-TRICHLOROBENZENE	<0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROBENZENE	<0.5	U	0.5	ug/L	991B-102914
			1,2,3-TRICHLOROPROPANE	<0.5	U	0.5	ug/L	991A-102914
			1,2,3-TRICHLOROPROPANE	<0.5	U	0.5	ug/L	991B-102914
			1,2,4-TRICHLOROBENZENE	<0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-2

Complete Analytical Results for Field QC (Field and Trip Blanks and Source Water)
Third and Fourth Quarter 2014 Monitoring
The Sherwin-Williams Company
Emeryville, California

Sample Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
FIELD BLANK	10/29/14	(SW8260B)	1,2,4-TRICHLOROBENZENE	<0.5	U	0.5	ug/L	991A-102914
			1,2,4-TRIMETHYLBENZENE	<0.5	U	0.5	ug/L	991B-102914
			1,2,4-TRIMETHYLBENZENE	<0.5	U	0.5	ug/L	991A-102914
			1,2-DIBROMO-3-CHLOROPROPANE	<2	U	2	ug/L	991B-102914
			1,2-DIBROMO-3-CHLOROPROPANE	<2	U	2	ug/L	991A-102914
			1,2-DIBROMOETHANE	<0.5	U	0.5	ug/L	991B-102914
			1,2-DIBROMOETHANE	<0.5	U	0.5	ug/L	991A-102914
			1,2-DICHLOROBENZENE	<0.5	U	0.5	ug/L	991B-102914
			1,2-DICHLOROBENZENE	<0.5	U	0.5	ug/L	991A-102914
			1,2-DICHLOROETHANE	<0.5	U	0.5	ug/L	
			1,2-DICHLOROETHANE	<0.5	U	0.5	ug/L	991B-102914
			1,2-DICHLOROPROPANE	<0.5	U	0.5	ug/L	
			1,2-DICHLOROPROPANE	<0.5	U	0.5	ug/L	991A-102914
			1,3,5-TRIMETHYLBENZENE	<0.5	U	0.5	ug/L	
			1,3,5-TRIMETHYLBENZENE	<0.5	U	0.5	ug/L	991B-102914
			1,3-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			1,3-DICHLOROBENZENE	<0.5	U	0.5	ug/L	991A-102914
			1,3-DICHLOROPROPANE	<0.5	U	0.5	ug/L	991B-102914
			1,3-DICHLOROPROPANE	<0.5	U	0.5	ug/L	991A-102914
			1,4-DICHLOROBENZENE	<0.5	U	0.5	ug/L	991B-102914
			1,4-DICHLOROBENZENE	<0.5	U	0.5	ug/L	991A-102914
			2,2-DICHLOROPROPANE	<0.5	U	0.5	ug/L	991B-102914
			2,2-DICHLOROPROPANE	<0.5	U	0.5	ug/L	991A-102914
			2-BUTANONE	<10	U	10	ug/L	991B-102914
			2-BUTANONE	<10	U	10	ug/L	991A-102914
			2-CHLOROTOLUENE	<0.5	U	0.5	ug/L	991B-102914
			2-CHLOROTOLUENE	<0.5	U	0.5	ug/L	991A-102914
			2-HEXANONE	**0.6**	J	10	ug/L	991B-102914
			2-HEXANONE	**0.7**	J	10	ug/L	991A-102914
			4-CHLOROTOLUENE	<0.5	U	0.5	ug/L	991B-102914
			4-CHLOROTOLUENE	<0.5	U	0.5	ug/L	991A-102914
			4-ISOPROPYL TOLUENE	<0.5	U	0.5	ug/L	
			4-ISOPROPYL TOLUENE	<0.5	U	0.5	ug/L	991B-102914
			4-METHYL-2-PENTANONE (MIBK)	<10	U	10	ug/L	991A-102914
			4-METHYL-2-PENTANONE (MIBK)	<10	U	10	ug/L	991B-102914
			ACETONE	**20**		10	ug/L	
			ACETONE	**21**		10	ug/L	991A-102914

Notes: All notes are listed at the end of this table - see last page.

Table C-2

Complete Analytical Results for Field QC (Field and Trip Blanks and Source Water)
Third and Fourth Quarter 2014 Monitoring
The Sherwin-Williams Company
Emeryville, California

Sample Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
FIELD BLANK	10/29/14	(SW8260B)	**BENZENE**	**0.1**	J	0.5	ug/L	991B-102914
			BENZENE	**0.1**	J	0.5	ug/L	991A-102914
			BROMOBENZENE	<0.5	U	0.5	ug/L	
			BROMOBENZENE	<0.5	U	0.5	ug/L	991B-102914
			BROMOCHLOROMETHANE	<0.5	U	0.5	ug/L	
			BROMOCHLOROMETHANE	<0.5	U	0.5	ug/L	991A-102914
			BROMODICHLOROMETHANE	<0.5	U	0.5	ug/L	
			BROMODICHLOROMETHANE	<0.5	U	0.5	ug/L	991B-102914
			BROMOFORM	<1	U	1	ug/L	991A-102914
			BROMOFORM	<1	U	1	ug/L	991B-102914
			BROMOMETHANE	<1	U	1	ug/L	991A-102914
			BROMOMETHANE	<1	U	1	ug/L	991B-102914
			BROMOMETHANE (METHYL BROMIDE)	<1	U	1	ug/L	991A-102914
			BROMOMETHANE (METHYL BROMIDE)	<1	U	1	ug/L	991B-102914
			CARBON DISULFIDE	<0.5	U	0.5	ug/L	
			CARBON DISULFIDE	<0.5	U	0.5	ug/L	991A-102914
			CARBON TETRACHLORIDE	<0.5	U	0.5	ug/L	
			CARBON TETRACHLORIDE	<0.5	U	0.5	ug/L	991B-102914
			CHLOROBENZENE	<0.5	U	0.5	ug/L	991A-102914
			CHLOROBENZENE	<0.5	U	0.5	ug/L	991B-102914
			CHLOROETHANE	<1	U	1	ug/L	
			CHLOROETHANE	<1	U	1	ug/L	991A-102914
			CHLOROFORM	<0.5	U	0.5	ug/L	991B-102914
			CHLOROFORM	<0.5	U	0.5	ug/L	991A-102914
			CHLOROMETHANE	<1	U	1	ug/L	991B-102914
			CHLOROMETHANE	<1	U	1	ug/L	991A-102914
			CIS-1,2-DICHLOROETHENE	<0.5	U	0.5	ug/L	
			CIS-1,2-DICHLOROETHENE	<0.5	U	0.5	ug/L	991B-102914
			CIS-1,3-DICHLOROPROPENE	<0.5	U	0.5	ug/L	991A-102914
			CIS-1,3-DICHLOROPROPENE	<0.5	U	0.5	ug/L	991B-102914
			DIBROMOCHLOROMETHANE	<0.5	U	0.5	ug/L	
			DIBROMOCHLOROMETHANE	<0.5	U	0.5	ug/L	991A-102914
			DIBROMOMETHANE	<0.5	U	0.5	ug/L	991B-102914
			DIBROMOMETHANE	<0.5	U	0.5	ug/L	991A-102914
			ETHYLBENZENE	<0.5	U	0.5	ug/L	991B-102914
			ETHYLBENZENE	<0.5	U	0.5	ug/L	991A-102914
			FREON 113	<2	U	2	ug/L	991B-102914

Notes: All notes are listed at the end of this table - see last page.

Table C-2

Complete Analytical Results for Field QC (Field and Trip Blanks and Source Water)
Third and Fourth Quarter 2014 Monitoring
The Sherwin-Williams Company
Emeryville, California

Sample Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
FIELD BLANK	10/29/14	(SW8260B)	FREON 113	<2	U	2	ug/L	991A-102914
			FREON 12	<1	U	1	ug/L	
			FREON 12	<1	U	1	ug/L	991B-102914
			HEXACHLOROBUTADIENE	<2	U	2	ug/L	
			HEXACHLOROBUTADIENE	<2	U	2	ug/L	991A-102914
			ISOPROPYLBENZENE	<0.5	U	0.5	ug/L	991B-102914
			ISOPROPYLBENZENE	<0.5	U	0.5	ug/L	991A-102914
			M,P-XYLENES	<0.5	U	0.5	ug/L	
			M,P-XYLENES	<0.5	U	0.5	ug/L	991B-102914
			M-DICHLORBENZENE	<0.5	U	0.5	ug/L	991A-102914
			M-DICHLORBENZENE	<0.5	U	0.5	ug/L	991B-102914
			METHYLENE CHLORIDE	<10	U	10	ug/L	
			METHYLENE CHLORIDE	<10	U	10	ug/L	991A-102914
			MTBE	<0.5	U	0.5	ug/L	
			MTBE	<0.5	U	0.5	ug/L	991B-102914
			N-BUTYLBENZENE	<0.5	U	0.5	ug/L	991A-102914
			N-BUTYLBENZENE	<0.5	U	0.5	ug/L	991B-102914
			N-PROPYLBENZENE	<0.5	U	0.5	ug/L	991A-102914
			N-PROPYLBENZENE	<0.5	U	0.5	ug/L	991B-102914
			NAPHTHALENE	<2	U	2	ug/L	
			NAPHTHALENE	<2	U	2	ug/L	991A-102914
			O-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			O-DICHLOROBENZENE	<0.5	U	0.5	ug/L	991B-102914
			O-XYLENE	<0.5	U	0.5	ug/L	991A-102914
			O-XYLENE	<0.5	U	0.5	ug/L	991B-102914
			P-CYMENE	<0.5	U	0.5	ug/L	991A-102914
			P-CYMENE	<0.5	U	0.5	ug/L	991B-102914
			P-DICHLOROBENZENE	<0.5	U	0.5	ug/L	991A-102914
			P-DICHLOROBENZENE	<0.5	U	0.5	ug/L	991B-102914
			PARA-ISOPROPYL TOLUENE	<0.5	U	0.5	ug/L	991A-102914
			PARA-ISOPROPYL TOLUENE	<0.5	U	0.5	ug/L	991B-102914
			PROPYLBENZENE	<0.5	U	0.5	ug/L	
			PROPYLBENZENE	<0.5	U	0.5	ug/L	991A-102914
			SEC-BUTYLBENZENE	<0.5	U	0.5	ug/L	991B-102914
			SEC-BUTYLBENZENE	<0.5	U	0.5	ug/L	991A-102914
			STYRENE	<0.5	U	0.5	ug/L	
			STYRENE	<0.5	U	0.5	ug/L	991B-102914

Notes: All notes are listed at the end of this table - see last page.

Table C-2

Complete Analytical Results for Field QC (Field and Trip Blanks and Source Water)
Third and Fourth Quarter 2014 Monitoring
The Sherwin-Williams Company
Emeryville, California

Sample Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
FIELD BLANK	10/29/14	(SW8260B)	TERT-BUTYLBENZENE	<0.5	U	0.5	ug/L	991A-102914
			TERT-BUTYLBENZENE	<0.5	U	0.5	ug/L	991B-102914
			TETRACHLOROETHENE	<0.5	U	0.5	ug/L	
			TETRACHLOROETHENE	<0.5	U	0.5	ug/L	991A-102914
			TOLUENE	**0.3**	J	0.5	ug/L	
			TOLUENE	**0.3**	J	0.5	ug/L	991B-102914
			TRANS-1,2-DICHLOROETHENE	<0.5	U	0.5	ug/L	
			TRANS-1,2-DICHLOROETHENE	<0.5	U	0.5	ug/L	991A-102914
			TRANS-1,3-DICHLOROPROPENE	<0.5	U	0.5	ug/L	991B-102914
			TRANS-1,3-DICHLOROPROPENE	<0.5	U	0.5	ug/L	991A-102914
			TRICHLOROETHENE	<0.5	U	0.5	ug/L	991B-102914
			TRICHLOROETHENE	<0.5	U	0.5	ug/L	991A-102914
			TRICHLOROFLUOROMETHANE	<1	U	1	ug/L	
			TRICHLOROFLUOROMETHANE	<1	U	1	ug/L	991B-102914
			VINYL ACETATE	<10	U	10	ug/L	
			VINYL ACETATE	<10	U	10	ug/L	991A-102914
			VINYL CHLORIDE	<0.5	U	0.5	ug/L	991B-102914
			VINYL CHLORIDE	<0.5	U	0.5	ug/L	991A-102914
		Metals (SW6010AS)	ARSENIC	<5	U	5	ug/L	
			ARSENIC	<5	U	5	ug/L	991B-102914
			ARSENIC, INORGANIC	<5	U	5	ug/L	991A-102914
			ARSENIC, INORGANIC	<5	U	5	ug/L	991B-102914
			ARSENIC, SPLP	<5	U	5	ug/L	
			ARSENIC, SPLP	<5	U	5	ug/L	991A-102914
	10/30/14		ARSENIC	<5	U	5	ug/L	991B-103014
			ARSENIC	<5	U	5	ug/L	991A-103014
			ARSENIC, INORGANIC	<5	U	5	ug/L	
			ARSENIC, INORGANIC	<5	U	5	ug/L	991B-103014
			ARSENIC, SPLP	<5	U	5	ug/L	991A-103014
			ARSENIC, SPLP	<5	U	5	ug/L	991B-103014
	10/31/14		ARSENIC	<5	U	5	ug/L	991B-103114
			ARSENIC	<5	U	5	ug/L	991A-103114
			ARSENIC, INORGANIC	<5	U	5	ug/L	
			ARSENIC, INORGANIC	<5	U	5	ug/L	991B-103114
			ARSENIC, SPLP	<5	U	5	ug/L	
			ARSENIC, SPLP	<5	U	5	ug/L	991A-103114

Notes: All notes are listed at the end of this table - see last page.

Table C-2

Complete Analytical Results for Field QC (Field and Trip Blanks and Source Water)
Third and Fourth Quarter 2014 Monitoring
The Sherwin-Williams Company
Emeryville, California

Sample Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
SOURCE WATER BLANK	07/08/14	Metals (SW6010AS)	ARSENIC	<5	U	5	ug/L	971-070814
			ARSENIC, INORGANIC	<5	U	5	ug/L	
			ARSENIC, SPLP	<5	U	5	ug/L	
	10/29/14	(SW8260B)	1,1,1,2-TETRACHLOROETHANE	<0.5	U	0.5	ug/L	971-102914
			1,1,1-TRICHLOROETHANE	<0.5	U	0.5	ug/L	
			1,1,2,2-TETRACHLOROETHANE	<0.5	U	0.5	ug/L	
			1,1,2-TRICHLOROETHANE	<0.5	U	0.5	ug/L	
			1,1-DICHLOROETHANE	<0.5	U	0.5	ug/L	
			1,1-DICHLOROETHENE	<0.5	U	0.5	ug/L	
			1,1-DICHLOROPROPENE	<0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROBENZENE	<0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROPROPANE	<0.5	U	0.5	ug/L	
			1,2,4-TRICHLOROBENZENE	<0.5	U	0.5	ug/L	
			1,2,4-TRIMETHYLBENZENE	<0.5	U	0.5	ug/L	
			1,2-DIBROMO-3-CHLOROPROPANE	<2	U	2	ug/L	
			1,2-DIBROMOETHANE	<0.5	U	0.5	ug/L	
			1,2-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			1,2-DICHLOROETHANE	<0.5	U	0.5	ug/L	
			1,2-DICHLOROPROPANE	<0.5	U	0.5	ug/L	
			1,3,5-TRIMETHYLBENZENE	<0.5	U	0.5	ug/L	
			1,3-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			1,3-DICHLOROPROPANE	<0.5	U	0.5	ug/L	
			1,4-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			2,2-DICHLOROPROPANE	<0.5	U	0.5	ug/L	
			2-BUTANONE	<10	U	10	ug/L	
			2-CHLOROTOLUENE	<0.5	U	0.5	ug/L	
			2-HEXANONE	**0.4**	J	10	ug/L	
			4-CHLOROTOLUENE	<0.5	U	0.5	ug/L	
			4-ISOPROPYL TOLUENE	<0.5	U	0.5	ug/L	
			4-METHYL-2-PENTANONE (MIBK)	<10	U	10	ug/L	
			ACETONE	**15**		10	ug/L	
			BENZENE	<0.5	U	0.5	ug/L	
			BROMOBENZENE	<0.5	U	0.5	ug/L	
			BROMOCHLOROMETHANE	<0.5	U	0.5	ug/L	
			BROMODICHLOROMETHANE	<0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-2

Complete Analytical Results for Field QC (Field and Trip Blanks and Source Water)
Third and Fourth Quarter 2014 Monitoring
The Sherwin-Williams Company
Emeryville, California

Sample Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
SOURCE WATER BLANK	10/29/14	(SW8260B)	BROMOFORM	<1	U	1	ug/L	971-102914
			BROMOMETHANE	<1	U	1	ug/L	
			BROMOMETHANE (METHYL BROMIDE)	<1	U	1	ug/L	
			CARBON DISULFIDE	<0.5	U	0.5	ug/L	
			CARBON TETRACHLORIDE	<0.5	U	0.5	ug/L	
			CHLOROBENZENE	<0.5	U	0.5	ug/L	
			CHLOROETHANE	<1	U	1	ug/L	
			CHLOROFORM	<0.5	U	0.5	ug/L	
			CHLOROMETHANE	<1	U	1	ug/L	
			CIS-1,2-DICHLOROETHENE	<0.5	U	0.5	ug/L	
			CIS-1,3-DICHLOROPROPENE	<0.5	U	0.5	ug/L	
			DIBROMOCHLOROMETHANE	<0.5	U	0.5	ug/L	
			DIBROMOMETHANE	<0.5	U	0.5	ug/L	
			ETHYLBENZENE	<0.5	U	0.5	ug/L	
			FREON 113	<2	U	2	ug/L	
			FREON 12	<1	U	1	ug/L	
			HEXACHLOROBUTADIENE	<2	U	2	ug/L	
			ISOPROPYLBENZENE	<0.5	U	0.5	ug/L	
			M,P-XYLENES	<0.5	U	0.5	ug/L	
			M-DICHLORBENZENE	<0.5	U	0.5	ug/L	
			METHYLENE CHLORIDE	<10	U	10	ug/L	
			MTBE	<0.5	U	0.5	ug/L	
			N-BUTYLBENZENE	<0.5	U	0.5	ug/L	
			N-PROPYLBENZENE	<0.5	U	0.5	ug/L	
			NAPHTHALENE	<2	U	2	ug/L	
			O-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			O-XYLENE	<0.5	U	0.5	ug/L	
			P-CYMENE	<0.5	U	0.5	ug/L	
			P-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			PARA-ISOPROPYL TOLUENE	<0.5	U	0.5	ug/L	
			PROPYLBENZENE	<0.5	U	0.5	ug/L	
			SEC-BUTYLBENZENE	<0.5	U	0.5	ug/L	
			STYRENE	<0.5	U	0.5	ug/L	
			TERT-BUTYLBENZENE	<0.5	U	0.5	ug/L	
			TETRACHLOROETHENE	<0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-2

Complete Analytical Results for Field QC (Field and Trip Blanks and Source Water)
Third and Fourth Quarter 2014 Monitoring
The Sherwin-Williams Company
Emeryville, California

Sample Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
SOURCE WATER BLANK	10/29/14	(SW8260B)	**TOLUENE**	**0.3**	J	0.5	ug/L	971-102914
			TRANS-1,2-DICHLOROETHENE	<0.5	U	0.5	ug/L	
			TRANS-1,3-DICHLOROPROPENE	<0.5	U	0.5	ug/L	
			TRICHLOROETHENE	<0.5	U	0.5	ug/L	
			TRICHLOROFLUOROMETHANE	<1	U	1	ug/L	
			VINYL ACETATE	<10	U	10	ug/L	
			VINYL CHLORIDE	<0.5	U	0.5	ug/L	
		Metals (SW6010AS)	ARSENIC	<5	U	5	ug/L	
			ARSENIC, INORGANIC	<5	U	5	ug/L	
			ARSENIC, SPLP	<5	U	5	ug/L	
TRIP BLANK	10/29/14	(SW8260B)	1,1,1,2-TETRACHLOROETHANE	<0.5	U	0.5	ug/L	981-102914
			1,1,1-TRICHLOROETHANE	<0.5	U	0.5	ug/L	
			1,1,2,2-TETRACHLOROETHANE	<0.5	U	0.5	ug/L	
			1,1,2-TRICHLOROETHANE	<0.5	U	0.5	ug/L	
			1,1-DICHLOROETHANE	<0.5	U	0.5	ug/L	
			1,1-DICHLOROETHENE	<0.5	U	0.5	ug/L	
			1,1-DICHLOROPROPENE	<0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROBENZENE	<0.5	U	0.5	ug/L	
			1,2,3-TRICHLOROPROPANE	<0.5	U	0.5	ug/L	
			1,2,4-TRICHLOROBENZENE	<0.5	U	0.5	ug/L	
			1,2,4-TRIMETHYLBENZENE	<0.5	U	0.5	ug/L	
			1,2-DIBROMO-3-CHLOROPROPANE	<2	U	2	ug/L	
			1,2-DIBROMOETHANE	<0.5	U	0.5	ug/L	
			1,2-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			1,2-DICHLOROETHANE	<0.5	U	0.5	ug/L	
			1,2-DICHLOROPROPANE	<0.5	U	0.5	ug/L	
			1,3,5-TRIMETHYLBENZENE	<0.5	U	0.5	ug/L	
			1,3-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			1,3-DICHLOROPROPANE	<0.5	U	0.5	ug/L	
			1,4-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			2,2-DICHLOROPROPANE	<0.5	U	0.5	ug/L	
			2-BUTANONE	<10	U	10	ug/L	
			2-CHLOROTOLUENE	<0.5	U	0.5	ug/L	
			2-HEXANONE	<10	U	10	ug/L	
			4-CHLOROTOLUENE	<0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-2

Complete Analytical Results for Field QC (Field and Trip Blanks and Source Water)
Third and Fourth Quarter 2014 Monitoring
The Sherwin-Williams Company
Emeryville, California

Sample Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
TRIP BLANK	10/29/14	(SW8260B)	4-ISOPROPYL TOLUENE	<0.5	U	0.5	ug/L	981-102914
			4-METHYL-2-PENTANONE (MIBK)	<10	U	10	ug/L	
			ACETONE	**1.1**	J	10	ug/L	
			BENZENE	<0.5	U	0.5	ug/L	
			BROMOBENZENE	<0.5	U	0.5	ug/L	
			BROMOCHLOROMETHANE	<0.5	U	0.5	ug/L	
			BROMODICHLOROMETHANE	<0.5	U	0.5	ug/L	
			BROMOFORM	<1	U	1	ug/L	
			BROMOMETHANE	<1	U	1	ug/L	
			BROMOMETHANE (METHYL BROMIDE)	<1	U	1	ug/L	
			CARBON DISULFIDE	<0.5	U	0.5	ug/L	
			CARBON TETRACHLORIDE	<0.5	U	0.5	ug/L	
			CHLOROBENZENE	<0.5	U	0.5	ug/L	
			CHLOROETHANE	<1	U	1	ug/L	
			CHLOROFORM	<0.5	U	0.5	ug/L	
			CHLOROMETHANE	<1	U	1	ug/L	
			CIS-1,2-DICHLOROETHENE	<0.5	U	0.5	ug/L	
			CIS-1,3-DICHLOROPROPENE	<0.5	U	0.5	ug/L	
			DIBROMOCHLOROMETHANE	<0.5	U	0.5	ug/L	
			DIBROMOMETHANE	<0.5	U	0.5	ug/L	
			ETHYLBENZENE	<0.5	U	0.5	ug/L	
			FREON 113	<2	U	2	ug/L	
			FREON 12	<1	U	1	ug/L	
			HEXACHLOROBUTADIENE	<2	U	2	ug/L	
			ISOPROPYLBENZENE	<0.5	U	0.5	ug/L	
			M,P-XYLENES	<0.5	U	0.5	ug/L	
			M-DICHLORBENZENE	<0.5	U	0.5	ug/L	
			METHYLENE CHLORIDE	<10	U	10	ug/L	
			MTBE	<0.5	U	0.5	ug/L	
			N-BUTYLBENZENE	<0.5	U	0.5	ug/L	
			N-PROPYLBENZENE	<0.5	U	0.5	ug/L	
			NAPHTHALENE	<2	U	2	ug/L	
			O-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			O-XYLENE	<0.5	U	0.5	ug/L	
			P-CYMENE	<0.5	U	0.5	ug/L	
			P-DICHLOROBENZENE	<0.5	U	0.5	ug/L	
			PARA-ISOPROPYL TOLUENE	<0.5	U	0.5	ug/L	

Notes: All notes are listed at the end of this table - see last page.

Table C-2

Complete Analytical Results for Field QC (Field and Trip Blanks and Source Water)
Third and Fourth Quarter 2014 Monitoring
The Sherwin-Williams Company
Emeryville, California

Sample Number	Sample Date	Analytical Group (Method)	Analyte	Result	Quals	Detection Limit	Units	Field Sample ID
TRIP BLANK	10/29/14	(SW8260B)	PROPYLBENZENE	<0.5	U	0.5	ug/L	981-102914
			SEC-BUTYLBENZENE	<0.5	U	0.5	ug/L	
			STYRENE	<0.5	U	0.5	ug/L	
			TERT-BUTYLBENZENE	<0.5	U	0.5	ug/L	
			TETRACHLOROETHENE	<0.5	U	0.5	ug/L	
			TOLUENE	<0.5	U	0.5	ug/L	
			TRANS-1,2-DICHLOROETHENE	<0.5	U	0.5	ug/L	
			TRANS-1,3-DICHLOROPROPENE	<0.5	U	0.5	ug/L	
			TRICHLOROETHENE	<0.5	U	0.5	ug/L	
			TRICHLOROFLUOROMETHANE	<1	U	1	ug/L	
			VINYL ACETATE	<10	U	10	ug/L	
			VINYL CHLORIDE	<0.5	U	0.5	ug/L	

Notes:

< = Analyte was not detected at or greater than the detection limit reported

ug/L = micrograms per liter

Data Qualifiers:

U = Not detected at or greater than the detection limit reported

J = Concentrations estimated

ARCADIS

Appendix D

Electronic Copies of Current and Historical Groundwater Monitoring Well Elevation and Analytical Data

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
CDM-1	01/18/2007	13.60	4.57	9.03
	04/12/2007		4.61	8.99
	07/19/2007		4.85	8.75
	10/12/2007		3.26	10.34
	01/17/2008		3.49	10.11
	04/10/2008		4.83	8.77
	07/24/2008		5.34	8.26
	10/22/2008		4.93	8.67
	01/08/2009		4.02	9.58
	04/09/2009		4.22	9.38
	07/16/2009		4.86	8.74
	10/16/2009		3.05	10.53
	01/14/2010		4.00	9.60
	04/23/2010		3.11	10.49
	07/23/2010		4.80	8.80
	10/15/2010		4.92	8.67
	01/28/2011		4.09	9.51
	04/19/2011		4.03	9.57
CDM-101	03/20/2012	18.97	9.80	9.17
	04/16/2012		8.55	10.42
	05/14/2012		9.35	9.62
	06/11/2012		9.21	9.76
	07/18/2012		9.50	9.47
	08/15/2012		9.25	9.72
	09/13/2012		9.29	9.68
	10/17/2012		9.28	9.69
	11/16/2012		8.96	10.01
	12/14/2012		8.17	10.80
	01/18/2013		8.58	10.39
	02/22/2013		9.10	9.87
	03/21/2013		8.89	10.08
	04/19/2013		8.75	10.22
	07/16/2013		9.26	9.71
	10/07/2013		9.63	9.34
	01/03/2014		9.58	9.39
	04/22/2014		8.96	10.01
	07/08/2014		9.53	9.44
	10/28/2014		9.84	9.13
CDM-102	03/20/2012	17.61	8.62	8.99
	04/16/2012		7.15	10.46
	05/14/2012		8.38	9.23
	06/11/2012		8.28	9.33
	07/18/2012		8.66	8.95
	08/15/2012		8.43	9.18
	09/13/2012		8.34	9.27

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
CDM-102	10/17/2012	17.61	8.28	9.33
	11/16/2012		7.96	9.65
	12/14/2012		7.12	10.49
	01/18/2013		7.55	10.06
	02/22/2013		8.16	9.45
	03/21/2013		7.94	9.67
	04/19/2013		7.90	9.71
	07/16/2013		8.55	9.06
	10/07/2013		8.73	8.88
	01/03/2014		8.60	9.01
	04/22/2014		7.95	9.66
	07/08/2014		8.60	9.01
	10/28/2014		8.89	8.72
CDM-103	03/20/2012	20.56	12.25	8.31
	04/16/2012		11.30	9.26
	05/14/2012		11.03	9.53
	06/11/2012		12.03	8.53
	07/18/2012		11.30	9.26
	08/15/2012		11.10	9.46
	09/13/2012		11.04	9.52
	10/17/2012		10.72	9.84
	11/16/2012		10.42	10.14
	12/14/2012		9.73	10.83
	01/18/2013		10.09	10.47
	02/22/2013		10.66	9.90
	03/21/2013		10.44	10.12
	04/19/2013		10.35	10.21
	07/16/2013		10.60	9.96
	10/07/2013		10.93	9.63
	01/03/2014		11.05	9.51
	04/22/2014		10.29	10.27
	07/08/2014		11.64	8.92
	10/28/2014		11.15	9.41
CDM-104	03/20/2012	18.60	8.51	10.09
	04/16/2012		8.07	10.53
	05/14/2012		8.73	9.87
	06/11/2012		8.99	9.61
	07/18/2012		9.14	9.46
	08/15/2012		9.14	9.46
	09/13/2012		9.25	9.35
	10/17/2012		9.18	9.42
	11/16/2012		8.80	9.80
	12/14/2012		8.09	10.51
	01/18/2013		8.45	10.15
	02/22/2013		9.00	9.60

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
CDM-104	03/21/2013	18.60	8.81	9.79
	04/19/2013		8.68	9.92
	07/16/2013		9.33	9.27
	10/07/2013		9.59	9.01
	01/03/2014		9.46	9.14
	04/22/2014		8.85	9.75
	07/08/2014		9.47	9.13
	10/28/2014		9.69	8.91
CDM-105	03/20/2012	15.83	7.82	8.01
	04/16/2012		6.92	8.91
	05/14/2012		7.63	8.20
	06/11/2012		7.80	8.03
	07/18/2012		7.85	7.98
	08/15/2012		8.01	7.82
	09/13/2012		8.03	7.80
	10/17/2012		8.14	7.69
	11/16/2012		7.85	7.98
	12/14/2012		7.25	8.58
	01/18/2013		7.48	8.35
	02/22/2013		7.80	8.03
	03/21/2013		7.99	7.84
	04/19/2013		7.89	7.94
	07/16/2013		8.55	7.28
	10/07/2013		8.96	6.87
	12/02/2013		8.17	7.66
	01/03/2014		8.47	7.36
	02/12/2014		5.96	9.87
	04/22/2014		7.60	8.23
	07/08/2014		8.60	7.23
	10/28/2014		9.11	6.72
CDM-106	03/20/2012	16.21	6.78	9.43
	04/16/2012		6.78	9.43
	05/14/2012		7.41	8.80
	06/11/2012		7.72	8.49
	07/18/2012		7.90	8.31
	08/15/2012		8.01	8.20
	09/13/2012		8.16	8.05
	10/17/2012		8.26	7.95
	11/16/2012		7.97	8.24
	12/14/2012		7.35	8.86
	01/18/2013		7.73	8.48
	02/22/2013		8.14	8.07
	03/21/2013		8.15	8.06
	04/19/2013		8.05	8.16
	07/16/2013		8.56	7.65

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
CDM-106	10/07/2013	16.21	8.81	7.40
	01/03/2014		8.58	7.63
	04/22/2014		7.94	8.27
	07/08/2014		8.62	7.59
	10/28/2014		8.90	7.31
CDM-107	02/23/2012	17.38	10.13	7.25
	03/20/2012		10.35	7.03
	04/16/2012		10.43	6.95
	05/14/2012		10.94	6.44
	06/11/2012		11.00	6.38
	07/18/2012		10.98	6.40
	08/15/2012		11.02	6.36
	09/13/2012		11.05	6.33
	10/17/2012		10.98	6.40
	11/16/2012		10.75	6.63
	12/14/2012		10.52	6.86
	01/18/2013		10.79	6.59
	02/22/2013		10.75	6.63
	03/21/2013		10.71	6.67
	04/19/2013		10.70	6.68
	07/16/2013		10.83	6.55
	10/07/2013		10.95	6.43
	12/02/2013		10.77	6.61
	01/03/2014		10.78	6.60
	02/12/2014		10.26	7.12
	04/22/2014		10.65	6.73
	07/08/2014		10.79	6.59
	10/28/2014		10.92	6.46
CDM-108	02/23/2012	17.71	9.83	7.88
	03/20/2012		10.15	7.56
	04/16/2012		10.30	7.41
	05/14/2012		10.54	7.17
	06/11/2012		10.56	7.15
	07/18/2012		10.60	7.11
	08/15/2012		10.70	7.01
	09/13/2012		10.70	7.01
	10/17/2012		10.74	6.97
	11/16/2012		10.55	7.16
	12/14/2012		10.23	7.48
	01/18/2013		10.38	7.33
	02/22/2013		10.49	7.22
	03/21/2013		10.50	7.21
	04/19/2013		10.48	7.23
	07/16/2013		10.71	7.00
	10/07/2013		10.85	6.86

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
CDM-108	12/02/2013	17.71	10.58	7.13
	01/03/2014		10.67	7.04
	02/12/2014		9.89	7.82
	04/22/2014		10.34	7.37
	07/08/2014		10.63	7.08
	10/28/2014		10.84	6.87
CDM-109	02/23/2012	15.44	7.49	7.95
	03/20/2012		7.86	7.58
	04/16/2012		7.88	7.56
	05/14/2012		7.91	7.53
	06/11/2012		7.95	7.49
	07/18/2012		7.94	7.50
	08/15/2012		7.99	7.45
	09/13/2012		7.99	7.45
	10/17/2012		8.00	7.44
	11/16/2012		7.91	7.53
	12/14/2012		7.88	7.56
	01/18/2013		7.94	7.50
	02/22/2013		7.93	7.51
	03/21/2013		7.96	7.48
	04/19/2013		7.95	7.49
	07/16/2013		8.06	7.38
	10/07/2013		8.16	7.28
	01/03/2014		8.00	7.44
	04/22/2014		7.93	7.51
	07/08/2014		8.06	7.38
	10/28/2014		8.21	7.23
CDM-110	03/20/2012	15.62	4.65	10.97
	04/16/2012		3.75	11.87
	05/14/2012		4.77	10.85
	06/11/2012		5.18	10.44
	07/18/2012		5.32	10.30
	08/15/2012		5.37	10.25
	09/13/2012		5.52	10.10
	10/17/2012		5.51	10.11
	11/16/2012		4.93	10.69
	12/14/2012		4.15	11.47
	01/18/2013		4.64	10.98
	02/22/2013		5.10	10.52
	03/21/2013		5.00	10.62
	04/19/2013		4.77	10.85
	07/16/2013		5.47	10.15
	10/07/2013		5.59	10.03
	01/03/2014		5.62	10.00
	04/22/2014		4.85	10.77

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
CDM-110	07/08/2014	15.62	5.56	10.06
	10/28/2014		5.72	9.90
CDM-111	03/20/2012	18.14	6.84	11.30
	04/16/2012		6.38	11.76
	05/14/2012		7.49	10.65
	06/11/2012		7.89	10.25
	07/18/2012		8.10	10.04
	08/15/2012		8.19	9.95
	09/13/2012		8.34	9.80
	10/17/2012		8.33	9.81
	11/16/2012		7.75	10.39
	12/14/2012		6.89	11.25
	01/18/2013		7.40	10.74
	02/22/2013		8.02	10.12
	03/21/2013		7.94	10.20
	04/19/2013		7.66	10.48
	07/16/2013		8.41	9.73
	10/07/2013		8.56	9.58
	01/03/2014		8.51	9.63
	04/22/2014		7.80	10.34
	07/08/2014		8.58	9.56
	10/28/2014		8.81	9.33
CDM-112	03/20/2012	15.70	4.81	10.89
	04/16/2012		4.63	11.07
	05/14/2012		5.30	10.40
	06/11/2012		5.54	10.16
	07/18/2012		5.73	9.97
	08/15/2012		5.54	10.16
	09/13/2012		5.78	9.92
	10/17/2012		5.70	10.00
	11/16/2012		5.34	10.36
	12/14/2012		4.83	10.87
	01/18/2013		5.17	10.53
	02/22/2013		5.40	10.30
	03/21/2013		5.38	10.32
	04/19/2013		5.26	10.44
	07/16/2013		5.56	10.14
	10/07/2013		5.65	10.05
	01/03/2014		5.76	9.94
	04/22/2014		5.25	10.45
	07/08/2014		5.64	10.06
	10/28/2014		5.69	10.01
CDM-113	03/20/2012	15.47	4.11	11.36
	04/16/2012		3.66	11.81

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
CDM-113	05/14/2012	15.47	4.78	10.69
	06/11/2012		5.18	10.29
	07/18/2012		5.38	10.09
	08/15/2012		5.43	10.04
	09/13/2012		5.60	9.87
	10/17/2012		5.58	9.89
	11/16/2012		4.99	10.48
	12/14/2012		4.12	11.35
	01/18/2013		4.63	10.84
	02/22/2013		5.25	10.22
	03/21/2013		5.10	10.37
	04/19/2013		4.61	10.86
	07/16/2013		5.58	9.89
	10/07/2013		5.70	9.77
	01/03/2014		5.71	9.76
	04/22/2014		4.95	10.52
	07/08/2014		5.68	9.79
	10/28/2014		5.89	9.58
CDM-114	03/20/2012	14.72	3.02	11.70
	04/16/2012		2.60	12.12
	05/14/2012		3.66	11.06
	06/11/2012		3.90	10.82
	07/18/2012		4.13	10.59
	08/15/2012		4.33	10.39
	09/13/2012		4.41	10.31
	10/17/2012		4.42	10.30
	11/16/2012		3.73	10.99
	12/14/2012		2.90	11.82
	01/18/2013		3.50	11.22
	02/22/2013		3.88	10.84
	03/21/2013		3.83	10.89
	04/19/2013		3.62	11.10
	07/16/2013		4.34	10.38
	10/07/2013		4.55	10.17
	01/03/2014		4.51	10.21
	04/22/2014		3.68	11.04
	07/08/2014		4.43	10.29
	10/28/2014		4.66	10.06
EX-1	04/24/1996	12.78	15.42	-2.64
	07/29/1996		15.70	-2.92
	12/13/1996		3.20	9.58
	04/15/1997		15.50	-2.72
	09/19/1997		4.34	8.44
	12/03/1997		3.35	9.43
	12/15/1997		1.99	10.79

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-1	01/13/1998	12.78	2.15	10.63
	01/30/1998		0.67	12.11
	02/24/1998		13.80	-1.02
	04/06/1998		3.43	9.35
	07/02/1998		5.68	7.10
	07/13/1998		15.38	-2.60
	09/28/1998		15.36	-2.58
	10/16/1998		15.50	-2.72
	01/08/1999		13.84	-1.06
	04/16/1999		15.50	-2.72
	06/21/1999		15.40	-2.62
	07/12/1999		15.60	-2.82
	10/08/1999		15.80	-3.02
	01/17/2000		5.43	7.35
	04/25/2000		3.00	9.78
	05/30/2000		3.83	8.95
	06/26/2000		NM	NM
	08/10/2000		12.70	8.00
	10/06/2000		9.61	3.17
	01/15/2001		15.63	-2.85
	04/19/2001		3.00	9.78
	07/02/2001		15.40	-2.62
	09/07/2001		NM	NM
	10/18/2001		11.10	1.68
	11/02/2001		NM	NM
	12/14/2001		1.25	11.53
	01/18/2002		2.39	10.39
	02/21/2002		NM	NM
	03/25/2002		3.39	9.39
	04/18/2002		15.45	-2.67
	05/10/2002		4.59	8.19
	06/04/2002		4.11	8.67
	07/10/2002		NM	NM
	08/15/2002		4.90	7.88
	09/11/2002		5.05	7.73
	10/08/2002		5.31	7.47
	11/07/2002		4.15	8.63
	12/12/2002		16.51	-3.73
	01/13/2003		16.48	-3.70
	02/26/2003		8.50	4.28
	03/19/2003		14.32	-1.54
	04/14/2003		3.80	8.98
	05/13/2003		14.40	-1.62
	06/13/2003		5.51	7.27
	07/07/2003		8.75	4.03

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-1	08/13/2003	12.78	5.90	6.88
	09/17/2003		14.70	-1.92
	10/27/2003		6.01	6.77
	11/18/2003		5.23	7.55
	12/19/2003		18.40	-5.62
	01/15/2004		3.75	9.03
	02/17/2004		12.16	0.62
	03/18/2004		11.04	1.74
	04/21/2004		14.75	-1.97
	05/18/2004		14.80	-2.02
	06/10/2004		14.20	-1.42
	07/15/2004		8.15	4.63
	08/12/2004		14.55	-1.77
	09/16/2004		6.00	6.78
	10/12/2004		5.62	7.16
	11/17/2004		13.75	-0.97
	12/15/2004		14.10	-1.32
	01/24/2005		11.97	0.81
	02/15/2005		13.20	-0.42
	03/15/2005		6.52	6.26
	04/25/2005		14.29	-1.51
	05/20/2005		13.80	-1.02
	06/21/2005		4.90	7.88
	07/20/2005		10.70	2.08
	08/19/2005		15.35	-2.57
	09/16/2005		18.25	-5.47
	10/21/2005		15.00	-2.22
	11/18/2005		5.78	7.00
	12/16/2005		17.69	-4.91
	01/20/2006		4.00	8.78
	02/22/2006		15.90	-3.12
	03/30/2006		14.86	-2.08
	04/27/2006		15.11	-2.33
	05/18/2006		15.09	-2.31
	06/22/2006		5.42	7.36
	07/20/2006		16.84	-4.06
	08/17/2006		17.20	-4.42
	09/14/2006		17.53	-4.75
	10/19/2006		14.70	-1.92
	11/21/2006		17.75	-4.97
	12/21/2006		6.35	6.43
	01/18/2007		16.58	-3.80
	02/06/2007		16.60	-3.82
	03/08/2007		16.68	-3.90
	04/12/2007		16.69	-3.91

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-1	05/10/2007	12.78	4.62	8.16
	06/07/2007		16.90	-4.12
	07/19/2007		16.95	-4.17
	08/09/2007		15.93	-3.15
	08/17/2007		6.13	6.65
	08/24/2007		6.00	6.78
	08/30/2007		5.98	6.80
	09/06/2007		5.81	6.97
	09/14/2007		5.76	7.02
	09/21/2007		5.58	7.20
	09/28/2007		5.43	7.35
	10/05/2007		5.33	7.45
	10/12/2007		4.25	8.53
	10/19/2007		NM	NM
	10/26/2007		3.90	8.88
	11/02/2007		3.89	8.89
	11/09/2007		3.79	8.99
	11/15/2007		3.33	9.45
	11/21/2007		3.28	9.50
	11/29/2007		3.25	9.53
	12/14/2007		2.97	9.81
	01/17/2008		16.60	-3.82
	02/21/2008		16.62	-3.84
	03/20/2008		14.93	-2.15
	04/10/2008		9.71	3.07
	05/08/2008		14.92	-2.14
	06/12/2008		14.64	-1.86
	07/24/2008		14.75	-1.97
	08/14/2008		15.00	-2.22
	09/18/2008		14.85	-2.07
	10/22/2008		14.87	-2.09
	11/13/2008		14.86	-2.08
	12/04/2008		14.80	-2.02
	01/08/2009		14.82	-2.04
	02/11/2009		14.45	-1.67
	03/12/2009		14.76	-1.98
	04/09/2009		15.20	-2.42
	05/20/2009		14.43	-1.65
	06/17/2009		14.54	-1.76
	07/16/2009		14.48	-1.70
	08/13/2009		14.60	-1.82
	09/10/2009		14.75	-1.97
	10/16/2009		14.64	-1.88
	11/12/2009		17.47	-4.69
	12/03/2009		14.80	-2.02

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-1	01/14/2010	12.78	14.23	-1.45
	02/18/2010		14.20	-1.42
	03/25/2010		14.34	-1.56
	04/23/2010		14.91	-2.13
	05/21/2010		14.12	-1.34
	06/10/2010		16.53	-3.75
	07/23/2010		16.67	-3.89
	08/12/2010		14.81	-2.03
	09/10/2010		14.87	-2.09
	10/15/2010		15.39	-2.62
	11/04/2010		14.53	-1.75
	12/03/2010		13.80	-1.02
	01/28/2011		15.43	-2.65
	02/10/2011		16.65	-3.87
	03/31/2011		8.57	4.21
	04/19/2011		15.22	-2.44
EX-10	09/28/1998	14.49	5.71	8.77
	10/16/1998		5.96	8.52
	01/08/1999		15.11	-0.62
	04/16/1999		18.00	-3.51
	06/21/1999		18.30	-3.81
	07/12/1999		18.58	-4.09
	10/08/1999		9.95	4.54
	01/17/2000		10.50	3.99
	04/25/2000		3.98	10.51
	05/30/2000		6.60	7.89
	06/26/2000		NM	NM
	08/10/2000		6.35	8.14
	10/06/2000		6.20	8.29
	01/15/2001		5.49	9.00
	04/19/2001		4.50	9.99
	07/02/2001		6.61	7.88
	09/07/2001		NM	NM
	10/18/2001		5.17	9.32
	11/02/2001		NM	NM
	12/14/2001		1.30	13.19
	01/18/2002		18.28	-3.79
	02/21/2002		NM	NM
	03/25/2002		18.20	-3.71
	04/18/2002		18.35	-3.86
	05/10/2002		10.57	3.92
	06/04/2002		18.20	-3.71
	07/10/2002		18.10	-3.61
	08/15/2002		18.40	-3.91
	09/11/2002		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-10	10/08/2002	14.49	5.71	8.78
	11/07/2002		18.21	-3.72
	12/12/2002		18.33	-3.84
	01/13/2003		18.26	-3.77
	02/26/2003		18.20	-3.71
	03/19/2003		17.61	-3.12
	04/14/2003		7.00	7.49
	05/13/2003		4.90	9.59
	06/13/2003		17.75	-3.26
	07/07/2003		5.92	8.57
	08/13/2003		18.05	-3.56
	09/17/2003		16.70	-2.21
	10/27/2003		9.95	4.54
	11/18/2003		16.72	-2.23
	12/19/2003		8.48	6.01
	01/15/2004		7.25	7.24
	02/17/2004		5.50	8.99
	03/18/2004		11.55	2.94
	04/21/2004		7.54	6.95
	05/18/2004		7.85	6.64
	06/10/2004		12.65	1.84
	07/13/2004		6.35	8.14
	08/12/2004		16.42	-1.93
	09/16/2004		6.12	8.37
	10/12/2004		6.41	8.08
	11/17/2004		14.92	-0.43
	12/15/2004		15.85	-1.36
	01/25/2005		15.05	-0.56
	02/15/2005		3.86	10.63
	03/15/2005		10.30	4.19
	04/25/2005		4.31	10.18
	05/20/2005		15.31	-0.82
	06/21/2005		16.00	-1.51
	07/20/2005		16.40	-1.91
	08/19/2005		9.30	5.19
	09/16/2005		17.46	-2.97
	10/21/2005		17.52	-3.03
	11/18/2005		4.81	9.68
	12/16/2005		16.73	-2.24
	01/20/2006		15.55	-1.06
	02/22/2006		8.10	6.39
	03/30/2006		8.30	6.19
	04/27/2006		16.89	-2.40
	05/18/2006		17.05	-2.56
	06/22/2006		5.91	8.58

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-10	07/20/2006	14.49	17.10	-2.61
	08/17/2006		13.55	0.94
	09/14/2006		5.26	9.23
	10/19/2006		17.05	-2.56
	11/21/2006		20.18	-5.69
	12/21/2006		20.00	-5.51
	01/18/2007		18.61	-4.12
	02/06/2007		4.77	9.72
	03/08/2007		9.36	5.13
	04/12/2007		8.46	6.03
	05/10/2007		5.08	9.41
	06/07/2007		19.15	-4.66
	07/19/2007		5.59	8.90
	08/09/2007		19.05	-4.56
	09/14/2007		4.89	9.60
	10/05/2007		4.51	9.98
	10/12/2007		2.89	11.60
	10/26/2007		3.72	10.77
	11/02/2007		3.90	10.59
	11/09/2007		4.01	10.48
	12/14/2007		10.80	3.69
	01/17/2008		7.06	7.43
	02/21/2008		4.16	10.33
	03/20/2008		6.55	7.94
	04/10/2008		6.23	8.26
	05/08/2008		17.12	-2.63
	06/12/2008		7.37	7.12
	07/24/2008		8.45	6.04
	08/14/2008		19.62	-5.13
	09/18/2008		11.05	3.44
	10/22/2008		19.49	-5.00
	11/13/2008		15.50	-1.01
	12/04/2008		15.40	-0.91
	01/08/2009		11.50	2.99
	02/11/2009		7.85	6.64
	03/12/2009		19.33	-4.84
	04/09/2009		15.08	-0.59
	05/20/2009		17.85	-3.36
	06/17/2009		10.97	3.52
	07/16/2009		16.94	-2.45
	08/13/2009		20.10	-5.61
	09/10/2009		16.60	-2.11
	10/16/2009		7.35	7.12
	11/12/2009		20.39	-5.90
	12/03/2009		17.39	-2.90

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-10	01/14/2010	14.49	19.48	-4.99
	02/18/2010		16.74	-2.25
	03/25/2010		18.73	-4.24
	04/23/2010		7.66	6.83
	05/21/2010		19.67	-5.18
	06/10/2010		9.14	5.35
	07/23/2010		17.27	-2.78
	08/12/2010		17.60	-3.11
	09/10/2010		13.25	1.24
	10/15/2010		17.94	-3.46
	11/04/2010		15.34	-0.85
	12/03/2010		11.25	3.24
	01/28/2011		18.90	-4.41
	02/10/2011		10.35	4.14
	03/31/2011		10.01	4.48
	04/19/2011		11.71	2.78
	10/05/2011		9.88	4.61
	10/12/2011		8.48	6.01
	10/19/2011		10.10	4.39
	10/26/2011		12.03	2.46
	11/02/2011		11.75	2.74
	11/09/2011		11.21	3.28
	11/16/2011		11.08	3.41
	11/23/2011		10.20	4.29
	11/30/2011		10.64	3.85
	12/06/2011		10.83	3.66
	01/27/2012		NM	NM
	02/23/2012		4.63	9.86
	03/20/2012		NM	NM
EX-11	06/21/1999	17.97	8.79	9.18
	07/12/1999		9.07	8.90
	10/08/1999		9.17	8.80
EX-12	06/21/1999	18.33	8.97	9.36
	07/12/1999		9.15	9.18
	10/08/1999		9.35	8.98
EX-13	06/21/1999	17.20	7.86	9.34
	07/12/1999		8.20	9.00
	10/08/1999		8.30	8.90
EX-14	10/08/1999	18.74	14.15	4.94
	01/17/2000		10.32	9.28
	04/25/2000		9.74	9.86
	05/30/2000		14.08	5.52
	06/26/2000		14.40	5.20
	08/10/2000		14.50	5.10

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-14	08/31/2000	18.74	10.19	9.41
	09/25/2000		14.51	5.09
	10/06/2000		14.50	5.10
	11/21/2000		10.54	9.06
	12/18/2000		10.13	9.47
	01/15/2001		15.30	4.30
	02/14/2001		9.51	10.09
	03/01/2001		14.12	5.48
	04/19/2001		9.99	9.61
	05/23/2001		12.85	5.89
	06/14/2001		9.93	8.81
	07/02/2001		13.04	5.70
	08/10/2001		13.04	5.70
	09/07/2001		9.65	9.09
	10/18/2001		15.96	10.70
	11/02/2001		10.05	8.69
	12/14/2001		12.75	5.99
	01/18/2002		12.39	6.35
	02/21/2002		NM	NM
	03/25/2002		12.76	5.98
	04/18/2002		12.94	5.80
	05/10/2002		12.99	5.75
	06/04/2002		12.72	6.02
	07/10/2002		9.59	9.15
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		9.03	9.71
	11/07/2002		13.11	5.63
	12/12/2002		14.84	3.90
	01/13/2003		8.30	10.44
	02/26/2003		7.67	11.07
	03/19/2003		13.61	5.13
	04/14/2003		13.46	5.28
	05/13/2003		8.64	10.10
	06/13/2003		12.84	5.90
	07/07/2003		8.83	9.91
	08/13/2003		13.18	5.56
	09/17/2003		13.02	5.72
	10/27/2003		12.84	5.90
	11/18/2003		9.05	9.69
	12/19/2003		9.14	9.60
	01/15/2004		9.10	9.64
	02/17/2004		9.09	9.65
	03/18/2004		8.75	9.99
	04/21/2004		13.95	4.79

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-14	05/18/2004	18.74	12.82	5.92
	06/10/2004		9.40	9.34
	07/13/2004		9.02	9.72
	08/12/2004		13.30	5.44
	09/16/2004		9.30	9.44
	10/12/2004		9.13	9.61
	11/17/2004		13.05	5.69
	12/15/2004		13.20	5.54
	01/25/2005		8.24	10.50
	02/15/2005		8.70	10.04
	03/15/2005		12.70	6.04
	04/25/2005		8.38	10.36
	05/20/2005		8.52	10.22
	06/21/2005		8.80	9.94
	07/20/2005		12.20	6.54
	08/19/2005		11.55	7.19
	09/16/2005		12.50	6.24
	10/21/2005		13.25	5.49
	11/18/2005		13.13	5.61
	12/16/2005		11.52	7.22
	01/20/2006		7.86	10.88
	02/22/2006		8.97	9.77
	03/30/2006		9.03	9.71
	04/27/2006		8.70	10.04
	05/18/2006		9.08	9.66
	06/22/2006		8.94	9.80
	07/20/2006		9.22	9.52
	08/17/2006		12.60	6.14
	09/14/2006		9.14	9.60
	10/19/2006		9.54	9.20
	11/21/2006		8.64	10.10
	12/21/2006		7.77	10.97
	01/18/2007		14.48	4.26
	02/06/2007		14.48	4.26
	03/08/2007		12.90	5.84
	04/12/2007		10.72	8.02
	05/10/2007		10.76	7.98
	06/07/2007		10.49	8.25
	07/19/2007		12.80	5.94
	08/09/2007		8.33	10.41
	09/14/2007		8.41	10.33
	10/12/2007		8.20	10.54
	11/09/2007		NM	NM
	12/14/2007		8.12	10.62
	01/17/2008		10.15	8.59

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-14	02/21/2008	18.74	NM	NM
	03/20/2008		13.26	5.48
	04/10/2008		14.61	4.13
	05/08/2008		14.60	4.14
	06/12/2008		10.87	7.87
	07/24/2008		7.02	11.72
	08/14/2008		9.03	9.71
	09/18/2008		8.66	10.08
	10/22/2008		13.16	5.58
	11/13/2008		13.25	5.49
	12/04/2008		9.29	9.45
	01/08/2009		9.45	9.29
	02/11/2009		11.31	7.43
	03/12/2009		13.45	5.29
	04/09/2009		12.30	6.44
	05/20/2009		NM	NM
	06/17/2009		NM	NM
	07/16/2009		12.58	6.16
	08/13/2009		12.70	6.04
	09/10/2009		12.47	6.27
	10/16/2009		7.96	10.76
	11/12/2009		9.60	9.14
	12/03/2009		8.25	10.49
	01/14/2010		12.45	6.29
	02/18/2010		11.26	7.48
	03/25/2010		12.28	6.46
	04/23/2010		10.13	8.61
	05/21/2010		12.63	6.11
	06/10/2010		10.97	7.77
	07/23/2010		11.74	7.00
	08/12/2010		11.48	7.26
	09/10/2010		12.05	6.69
	10/15/2010		13.25	5.48
	11/04/2010		10.93	7.81
	12/03/2010		11.44	7.30
	01/28/2011		10.13	8.61
	02/10/2011		11.93	6.81
	03/31/2011		11.68	7.06
	04/19/2011		11.59	7.15
	03/20/2012		8.39	10.35
EX-15	01/17/2000	17.88	NM	NM
	04/25/2000		8.08	9.81
	05/30/2000		12.15	5.74
	06/26/2000		15.25	-3.30
	08/10/2000		15.11	10.70

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-15	08/31/2000	17.88	8.70	9.19
	09/25/2000		10.14	7.75
	10/06/2000		12.65	5.24
	11/21/2000		8.75	9.14
	12/18/2000		8.60	9.29
	01/15/2001		15.40	2.49
	02/14/2001		7.82	10.07
	03/01/2001		14.96	2.93
	04/19/2001		14.17	3.72
	05/23/2001		14.68	3.20
	06/14/2001		9.61	8.27
	07/02/2001		14.65	3.23
	08/10/2001		14.56	3.32
	09/07/2001		14.40	3.48
	10/18/2001		16.02	1.86
	11/02/2001		12.10	5.78
	12/14/2001		14.54	3.34
	01/18/2002		14.40	3.48
	02/21/2002		14.34	3.54
	03/25/2002		14.41	3.47
	04/18/2002		14.48	3.40
	05/10/2002		14.55	3.33
	06/04/2002		NM	NM
	07/10/2002		13.41	4.47
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		8.43	9.45
	11/07/2002		14.09	3.79
	12/12/2002		14.41	3.47
	01/13/2003		14.22	3.66
	02/26/2003		14.51	3.37
	03/19/2003		14.32	3.56
	04/14/2003		14.12	3.76
	05/13/2003		14.32	3.56
	06/13/2003		13.44	4.44
	07/07/2003		13.71	4.17
	09/17/2003		12.48	5.40
	10/27/2003		12.50	5.38
	11/18/2003		13.69	4.19
	12/19/2003		12.61	5.27
	01/15/2004		13.10	4.78
	02/17/2004		13.30	4.58
	03/18/2004		13.53	4.35
	04/21/2004		13.50	4.38
	05/18/2004		12.95	4.93

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-15	06/10/2004	17.88	13.68	4.20
	07/13/2004		13.55	4.33
	08/12/2004		13.85	4.03
	09/16/2004		13.38	4.50
	10/12/2004		13.82	4.06
	11/17/2004		13.72	4.16
	12/15/2004		13.43	4.45
	01/25/2005		12.95	4.93
	02/15/2005		13.58	4.30
	03/15/2005		12.75	5.13
	04/25/2005		7.70	10.18
	05/20/2005		7.83	10.05
	06/21/2005		10.80	7.08
	07/20/2005		13.48	4.40
	08/19/2005		12.10	5.78
	09/16/2005		13.55	4.33
	10/21/2005		13.05	4.83
	11/18/2005		12.82	5.06
	12/16/2005		13.01	4.87
	01/20/2006		7.00	10.88
	02/22/2006		10.71	7.17
	03/30/2006		9.70	8.18
	04/27/2006		9.55	8.33
	05/18/2006		NM	NM
	06/22/2006		11.45	6.43
	07/20/2006		7.80	10.08
	08/17/2006		10.90	6.98
	09/14/2006		10.58	7.30
	10/19/2006		10.65	7.23
	11/21/2006		10.36	7.52
	12/21/2006		11.80	6.08
	01/18/2007		7.51	10.37
	02/06/2007		10.39	7.49
	03/08/2007		11.99	5.89
	04/12/2007		11.63	6.25
	05/10/2007		10.15	7.73
	06/07/2007		11.75	6.13
	07/19/2007		7.78	10.10
	08/09/2007		14.92	2.96
	09/14/2007		7.58	10.30
	10/12/2007		7.37	10.51
	11/09/2007		7.31	10.57
	12/14/2007		12.34	5.54
	01/17/2008		14.65	3.23
	02/21/2008		6.83	11.05

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-15	03/20/2008	17.88	11.25	6.63
	04/10/2008		14.52	3.36
	05/08/2008		12.34	5.54
	06/12/2008		8.80	9.08
	07/24/2008		12.00	5.88
	08/14/2008		16.19	1.69
	09/18/2008		8.14	9.74
	10/22/2008		15.00	2.88
	11/13/2008		10.53	7.35
	12/04/2008		7.95	9.93
	01/08/2009		16.25	1.63
	02/11/2009		10.02	7.86
	03/12/2009		15.55	2.33
	04/09/2009		12.33	5.55
	05/20/2009		11.67	6.21
	06/17/2009		12.17	5.71
	07/16/2009		12.35	5.53
	08/13/2009		12.35	5.53
	09/10/2009		11.55	6.33
	10/16/2009		7.91	9.95
	11/12/2009		12.29	5.59
	12/03/2009		12.40	5.48
	01/14/2010		8.75	9.13
	02/18/2010		12.37	5.51
	03/25/2010		11.95	5.93
	04/23/2010		NM	NM
	05/21/2010		12.47	5.41
	06/10/2010		12.13	5.75
	07/23/2010		11.62	6.26
	08/12/2010		12.41	5.47
	09/10/2010		11.78	6.10
	10/15/2010		11.35	6.52
	11/04/2010		11.42	6.46
	12/03/2010		12.19	5.69
	01/28/2011		10.05	7.83
	02/10/2011		16.01	1.87
	03/31/2011		11.12	6.76
	04/19/2011		12.63	5.25
	03/20/2012		7.45	10.43
EX-16	01/17/2000	18.49	9.77	9.16
	04/25/2000		9.15	9.78
	05/30/2000		10.00	8.93
	06/26/2000		10.05	8.88
	08/10/2000		10.17	8.76
	08/31/2000		9.51	9.42

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-16	09/25/2000	18.49	9.66	9.27
	10/06/2000		9.84	9.09
	11/21/2000		16.04	2.89
	12/18/2000		15.31	3.62
	01/15/2001		9.52	9.41
	02/14/2001		8.83	10.10
	03/01/2001		8.19	10.74
	04/19/2001		15.98	2.95
	05/23/2001		15.05	3.44
	06/14/2001		14.91	3.58
	07/02/2001		9.79	8.70
	08/10/2001		13.71	4.78
	09/07/2001		15.01	3.48
	10/18/2001		14.69	3.80
	11/02/2001		9.66	8.83
	12/14/2001		10.91	7.58
	01/18/2002		8.98	9.51
	02/21/2002		8.15	10.34
	03/25/2002		7.33	11.16
	04/18/2002		8.84	9.65
	05/10/2002		9.25	9.24
	06/04/2002		8.76	9.73
	07/10/2002		9.25	9.24
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		8.52	9.97
	11/07/2002		14.62	3.87
	12/12/2002		14.97	3.52
	01/13/2003		7.97	10.52
	02/26/2003		14.20	4.29
	03/19/2003		15.12	3.37
	04/14/2003		14.46	4.03
	05/13/2003		10.43	8.06
	06/13/2003		8.66	9.83
	07/07/2003		8.72	9.77
	08/13/2003		11.45	7.04
	09/17/2003		11.15	7.34
	10/27/2003		8.10	10.39
	11/18/2003		12.05	6.44
	12/19/2003		8.53	9.96
	01/15/2004		12.05	6.44
	02/17/2004		12.65	5.84
	03/18/2004		12.65	5.84
	04/21/2004		12.65	5.84
	05/18/2004		13.15	5.34

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-16	06/10/2004	18.49	16.80	1.69
	07/13/2004		13.70	4.79
	08/12/2004		13.65	4.84
	09/16/2004		12.61	5.88
	10/12/2004		12.68	5.81
	11/17/2004		12.82	5.67
	12/15/2004		13.70	4.79
	01/25/2005		13.40	5.09
	02/15/2005		14.20	4.29
	03/15/2005		13.31	5.18
	04/25/2005		14.20	4.29
	05/20/2005		12.14	6.35
	06/21/2005		10.51	7.98
	07/20/2005		12.88	5.00
	08/19/2005		12.45	5.43
	09/16/2005		11.79	6.70
	10/21/2005		11.71	6.78
	11/18/2005		11.49	7.00
	12/16/2005		11.76	6.73
	01/23/2006		11.54	6.95
	02/22/2006		10.10	8.39
	03/30/2006		9.23	9.26
	04/27/2006		9.93	8.56
	05/18/2006		11.83	6.66
	06/22/2006		11.95	6.54
	07/20/2006		11.48	7.01
	08/17/2006		11.30	7.19
	09/14/2006		10.88	7.61
	10/19/2006		12.35	6.14
	11/21/2006		12.18	6.31
	12/21/2006		12.00	6.49
	01/18/2007		8.43	10.06
	02/06/2007		8.71	9.78
	03/08/2007		7.69	10.80
	04/12/2007		8.24	10.25
	05/10/2007		NM	NM
	06/07/2007		16.28	2.21
	07/19/2007		10.15	8.34
	08/09/2007		9.90	8.59
	09/14/2007		8.23	10.26
	10/12/2007		7.99	10.50
	11/09/2007		7.96	10.53
	12/14/2007		8.02	10.47
	01/17/2008		10.48	8.01
	02/21/2008		8.23	10.26

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-16	03/20/2008	18.49	11.10	7.39
	04/10/2008		11.16	7.33
	05/08/2008		11.25	7.24
	06/12/2008		10.15	8.34
	07/24/2008		6.86	11.63
	08/14/2008		13.93	4.56
	09/18/2008		11.29	7.20
	10/22/2008		10.09	8.40
	11/13/2008		14.03	4.46
	12/04/2008		12.47	6.02
	01/08/2009		12.47	6.02
	02/11/2009		15.59	2.90
	03/12/2009		7.01	11.48
	04/09/2009		12.57	5.92
	05/20/2009		11.22	7.27
	06/17/2009		13.55	4.94
	07/16/2009		13.51	4.98
	08/13/2009		11.19	7.30
	09/10/2009		13.21	5.28
	10/16/2009		9.42	9.05
	11/12/2009		9.18	9.31
	12/03/2009		9.35	9.14
	01/14/2010		11.51	6.98
	02/18/2010		8.36	10.13
	03/25/2010		8.62	9.87
	04/23/2010		10.03	8.46
	05/21/2010		9.05	9.44
	06/10/2010		11.03	7.46
	07/23/2010		10.20	8.29
	08/12/2010		11.13	7.36
	09/10/2010		9.08	9.41
	10/15/2010		10.33	8.15
	11/04/2010		10.34	8.15
	12/03/2010		10.10	8.39
	01/28/2011		9.73	8.76
	02/10/2011		9.20	9.29
	03/31/2011		7.12	11.37
	04/19/2011		8.52	9.97
EX-2	04/24/1996	12.78	14.87	-2.09
	07/29/1996		14.50	-1.72
	12/13/1996		2.21	10.57
	04/15/1997		10.55	2.23
	09/19/1997		3.80	8.98
	12/03/1997		3.19	9.59
	12/15/1997		1.75	11.03

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-2	01/13/1998	12.78	0.34	12.44
	01/30/1998		0.66	12.12
	02/24/1998		2.50	10.28
	04/06/1998		3.02	9.76
	07/02/1998		5.68	7.10
	07/13/1998		5.20	7.58
	09/28/1998		15.53	-2.75
	10/16/1998		15.30	-2.52
	01/08/1999		7.15	5.63
	04/16/1999		4.46	8.32
	06/21/1999		11.40	1.38
	07/12/1999		15.65	-2.87
	10/08/1999		15.70	-2.92
	01/17/2000		6.30	6.48
	04/25/2000		2.48	10.30
	05/30/2000		3.55	9.23
	06/26/2000		NM	NM
	08/10/2000		12.20	0.58
	10/06/2000		13.71	-0.93
	01/15/2001		4.58	8.20
	04/19/2001		3.05	9.73
	07/02/2001		14.70	-1.92
	09/07/2001		NM	NM
	10/18/2001		7.16	5.62
	11/02/2001		NM	NM
	12/14/2001		0.08	12.70
	01/18/2002		5.55	7.23
	02/21/2002		NM	NM
	03/25/2002		4.01	8.77
	04/18/2002		15.09	-2.31
	05/10/2002		12.99	-0.21
	06/04/2002		6.00	6.78
	07/10/2002		4.80	7.98
	08/15/2002		16.11	-3.33
	09/11/2002		16.44	-3.66
	10/08/2002		15.32	-2.54
	11/07/2002		17.64	-4.86
	12/12/2002		13.92	-1.14
	01/13/2003		10.62	2.16
	02/26/2003		13.73	-0.95
	03/19/2003		12.41	0.37
	04/14/2003		13.20	-0.42
	05/13/2003		12.35	0.43
	06/13/2003		13.40	-0.62
	07/07/2003		13.49	-0.71

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-2	08/13/2003	12.78	13.74	-0.96
	09/17/2003		12.12	0.66
	10/27/2003		13.58	-0.80
	11/18/2003		13.74	-0.96
	12/19/2003		13.67	-0.89
	01/15/2004		14.20	-1.42
	02/17/2004		13.27	-0.49
	03/18/2004		5.12	7.66
	04/21/2004		12.91	-0.13
	05/18/2004		5.60	7.18
	06/10/2004		5.70	7.08
	07/13/2004		13.01	-0.23
	08/12/2004		12.90	-0.12
	09/16/2004		12.63	0.15
	10/12/2004		11.00	1.78
	11/17/2004		13.30	-0.52
	12/15/2004		12.80	-0.02
	01/25/2005		5.95	6.83
	02/15/2005		13.34	-0.56
	03/15/2005		6.09	6.69
	04/25/2005		8.90	3.88
	05/20/2005		6.99	5.79
	06/21/2005		13.20	-0.42
	07/20/2005		12.64	0.14
	08/19/2005		13.00	-0.22
	09/16/2005		13.07	-0.29
	10/21/2005		12.94	-0.16
	11/18/2005		7.56	5.22
	12/16/2005		13.24	-0.46
	01/20/2006		3.20	9.58
	02/22/2006		18.20	-5.42
	03/30/2006		4.75	8.03
	04/27/2006		13.32	-0.54
	05/18/2006		11.79	0.99
	06/22/2006		17.79	-5.01
	07/20/2006		13.27	-0.49
	08/17/2006		17.98	-5.20
	09/14/2006		14.45	-1.67
	10/19/2006		17.28	-4.50
	11/21/2006		17.24	-4.46
	12/21/2006		15.50	-2.72
	01/18/2007		5.17	7.61
	02/06/2007		5.25	7.53
	03/08/2007		12.11	0.67
	04/12/2007		16.97	-4.19

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-2	05/10/2007	12.78	4.74	8.04
	06/07/2007		6.25	6.53
	07/19/2007		16.05	-3.27
	08/09/2007		16.28	-3.50
	08/17/2007		6.40	6.38
	08/24/2007		6.14	6.64
	08/30/2007		5.91	6.87
	09/06/2007		5.65	7.13
	09/14/2007		5.52	7.26
	09/21/2007		5.27	7.51
	09/28/2007		5.07	7.71
	10/05/2007		4.93	7.85
	10/12/2007		4.19	8.59
	10/19/2007		NM	NM
	10/26/2007		3.55	9.23
	11/02/2007		3.55	9.23
	11/09/2007		3.51	9.27
	11/15/2007		2.96	9.82
	11/21/2007		3.02	9.76
	11/29/2007		3.01	9.77
	12/14/2007		11.90	0.88
	01/17/2008		12.48	0.30
	02/21/2008		4.15	8.63
	03/20/2008		13.75	-0.97
	04/10/2008		11.25	1.53
	05/08/2008		14.62	-1.84
	06/12/2008		14.20	-1.42
	07/24/2008		14.87	-2.09
	08/14/2008		14.65	-1.87
	09/18/2008		15.10	-2.32
	10/22/2008		14.87	-2.09
	11/13/2008		12.85	-7.00
	12/04/2008		14.06	-1.28
	01/08/2009		13.12	-0.34
	02/11/2009		17.80	-5.02
	03/12/2009		18.23	-5.45
	04/09/2009		15.38	-2.60
	05/20/2009		16.05	-3.27
	06/17/2009		16.11	-3.33
	07/16/2009		15.98	-3.20
	08/13/2009		15.13	-2.35
	09/10/2009		15.98	-3.20
	10/16/2009		6.18	6.58
	11/12/2009		15.92	-3.14
	12/03/2009		15.39	-2.61

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-2	01/14/2010	12.78	14.29	-1.51
	02/18/2010		17.45	-4.67
	03/25/2010		15.46	-2.68
	04/23/2010		13.86	-1.08
	05/21/2010		11.18	1.60
	06/10/2010		15.95	-3.17
	07/23/2010		15.55	-2.77
	08/12/2010		15.85	-3.07
	09/10/2010		15.65	-2.87
	10/15/2010		16.02	-3.25
	11/04/2010		15.44	-2.66
	12/03/2010		13.10	-0.32
	01/28/2011		12.90	-0.12
	02/10/2011		13.60	-0.82
	03/31/2011		17.95	-5.17
	04/19/2011		10.90	1.88
EX-3	04/24/1996	18.98	16.95	0.65
	07/29/1996		17.20	0.40
	12/13/1996		5.10	12.50
	04/15/1997		17.20	0.40
	09/19/1997		6.15	11.45
	12/03/1997		6.92	10.68
	12/15/1997		NM	NM
	01/13/1998		5.17	12.43
	01/30/1998		5.28	12.32
	02/24/1998		4.72	12.88
	04/06/1998		6.64	10.96
	07/02/1998		8.82	8.78
	07/13/1998		16.95	0.65
	09/28/1998		16.95	0.65
	10/16/1998		16.90	0.70
	01/08/1999		20.00	-2.40
	04/16/1999		16.92	0.68
	06/21/1999		16.95	0.65
	07/12/1999		16.99	0.61
	10/08/1999		17.22	0.38
	01/17/2000		8.71	8.89
	04/25/2000		7.15	10.45
	05/30/2000		17.00	0.60
	06/26/2000		NM	NM
	08/10/2000		14.00	3.60
	10/06/2000		15.55	2.05
	01/15/2001		15.50	2.10
	04/19/2001		15.61	1.99
	07/02/2001		16.00	1.60

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-3	09/07/2001	18.98	NM	NM
	10/18/2001		15.65	1.95
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		15.54	2.06
	02/21/2002		NM	NM
	03/25/2002		15.51	2.09
	04/18/2002		15.70	1.90
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		NM	NM
	08/15/2002		9.54	8.06
	09/11/2002		16.01	1.59
	10/08/2002		17.61	-10.00
	11/07/2002		15.69	1.91
	12/12/2002		15.41	2.19
	01/13/2003		18.00	-0.40
	02/26/2003		15.67	1.93
	03/19/2003		8.69	8.91
	04/14/2003		8.45	9.15
	05/13/2003		15.59	2.01
	06/13/2003		15.28	2.32
	07/07/2003		15.28	2.32
	08/13/2003		17.02	0.58
	09/17/2003		17.30	0.30
	10/27/2003		17.04	0.56
	11/18/2003		17.01	0.59
	12/19/2003		16.98	0.62
	01/15/2004		16.93	0.67
	02/17/2004		16.91	0.69
	03/22/2004		17.10	0.50
	04/21/2004		17.00	0.60
	05/18/2004		17.05	0.55
	06/10/2004		17.00	0.60
	07/13/2004		16.99	0.61
	08/12/2004		17.00	0.60
	09/16/2004		16.93	0.67
	10/12/2004		8.10	9.50
	11/17/2004		17.02	0.58
	12/15/2004		16.90	0.70
	01/25/2005		16.93	0.67
	02/15/2005		7.40	10.20
	03/15/2005		16.15	1.45
	04/25/2005		17.02	0.58
	05/20/2005		16.98	0.62

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-3	06/21/2005	18.98	16.95	0.65
	07/20/2005		16.94	0.66
	08/19/2005		17.15	0.45
	09/16/2005		17.02	0.58
	10/21/2005		16.99	0.61
	11/18/2005		7.87	9.73
	12/16/2005		14.40	3.20
	01/20/2006		7.75	9.85
	02/22/2006		7.88	9.72
	03/30/2006		15.70	1.90
	04/27/2006		19.30	-1.70
	05/18/2006		19.49	-1.89
	06/22/2006		19.18	-1.58
	07/20/2006		18.96	-1.36
	08/17/2006		12.78	4.82
	09/14/2006		19.18	-1.58
	10/19/2006		10.78	6.82
	11/21/2006		18.70	-1.10
	12/21/2006		19.20	-1.60
	01/18/2007		19.02	-1.42
	02/06/2007		19.11	-1.51
	03/08/2007		19.11	-1.51
	04/12/2007		19.25	-1.65
	05/10/2007		7.40	10.20
	06/07/2007		8.46	9.14
	07/19/2007		19.05	-1.45
	08/09/2007		19.04	-1.44
	09/14/2007		7.84	9.76
	10/05/2007		7.55	10.05
	10/12/2007		6.45	11.15
	10/26/2007		6.83	10.77
	11/02/2007		7.01	10.59
	11/09/2007		7.11	10.49
	12/14/2007		11.20	6.40
	01/17/2008		6.92	12.06
	02/21/2008		16.40	2.58
	03/20/2008		12.77	6.21
	04/10/2008		8.31	10.67
	05/08/2008		8.61	10.37
	06/12/2008		16.80	2.18
	07/24/2008		19.85	-0.87
	08/14/2008		17.77	1.21
	09/18/2008		17.51	1.47
	10/22/2008		18.06	0.92
	11/13/2008		18.15	0.83

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-3	12/04/2008	18.98	16.70	2.28
	01/08/2009		16.65	2.33
	02/11/2009		16.09	2.89
	03/12/2009		17.28	1.70
	04/09/2009		8.46	10.52
	05/20/2009		17.76	1.22
	06/17/2009		17.21	1.77
	07/16/2009		17.59	1.39
	08/13/2009		18.00	0.98
	09/10/2009		17.59	1.39
	10/16/2009		10.93	8.03
	11/12/2009		16.71	2.27
	12/03/2009		15.50	3.48
	01/14/2010		17.62	1.36
	02/18/2010		17.25	1.73
	03/25/2010		17.03	1.95
	04/23/2010		16.70	2.28
	05/21/2010		17.09	1.89
	06/10/2010		17.55	1.43
	07/23/2010		17.61	1.37
	08/12/2010		17.56	1.42
	09/10/2010		17.58	1.40
	10/15/2010		18.21	0.76
	11/04/2010		16.91	2.07
	12/03/2010		17.36	1.62
	01/28/2011		19.45	-0.47
	02/10/2011		17.50	1.48
	03/31/2011		19.93	-0.95
	04/19/2011		17.33	1.65
EX-4	09/28/1998	13.11	6.33	7.21
	10/16/1998		6.60	6.94
	01/08/1999		4.21	8.90
	04/16/1999		19.80	-6.69
	06/21/1999		5.89	7.22
	07/12/1999		20.20	-7.09
	10/08/1999		19.95	-6.84
	01/17/2000		13.43	-0.32
	04/25/2000		2.96	10.15
	05/30/2000		6.85	6.26
	06/26/2000		NM	NM
	08/10/2000		6.75	6.36
	10/06/2000		19.87	-6.76
	01/15/2001		19.73	-6.62
	04/19/2001		3.55	9.56
	07/02/2001		19.91	-6.80

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-4	09/07/2001	13.11	NM	NM
	10/18/2001		5.71	7.40
	11/02/2001		NM	NM
	12/14/2001		1.32	11.79
	01/18/2002		2.60	10.51
	02/21/2002		NM	NM
	03/25/2002		3.62	9.49
	04/18/2002		4.50	8.61
	05/10/2002		4.77	8.34
	06/04/2002		4.32	8.79
	07/10/2002		NM	NM
	08/15/2002		5.41	7.70
	09/11/2002		5.15	7.96
	10/08/2002		19.95	-6.84
	11/07/2002		15.63	-2.52
	12/12/2002		21.25	-8.14
	01/13/2003		20.74	-7.63
	02/26/2003		20.54	-7.43
	03/19/2003		20.14	-7.03
	04/14/2003		23.50	-10.39
	05/13/2003		23.35	-10.24
	06/13/2003		12.46	0.65
	07/07/2003		12.81	0.30
	08/13/2003		20.86	-7.75
	09/17/2003		20.85	-7.74
	10/27/2003		6.07	7.04
	11/18/2003		20.63	-7.52
	12/19/2003		20.90	-7.79
	01/15/2004		20.95	-7.84
	02/17/2004		20.60	-7.49
	03/18/2004		7.90	5.21
	04/21/2004		20.68	-7.57
	05/18/2004		20.63	-7.52
	06/10/2004		20.12	-7.01
	07/15/2004		20.50	-7.39
	08/12/2004		19.15	-6.04
	09/16/2004		11.57	1.54
	10/12/2004		20.93	-7.82
	11/17/2004		21.16	-8.05
	12/15/2004		20.82	-7.71
	01/25/2005		9.18	3.93
	02/15/2005		3.95	9.16
	03/15/2005		20.57	-7.46
	04/25/2005		11.80	1.31
	05/20/2005		17.00	-3.89

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-4	06/21/2005	13.11	18.60	-5.49
	07/20/2005		19.15	-6.04
	08/19/2005		10.80	2.31
	09/16/2005		24.05	-10.94
	10/21/2005		16.22	-3.11
	11/18/2005		17.81	-4.70
	12/16/2005		18.43	-5.32
	01/20/2006		17.05	-3.94
	02/22/2006		17.55	-4.44
	03/30/2006		14.75	-1.64
	04/27/2006		20.82	-7.71
	05/18/2006		21.01	-7.90
	06/22/2006		22.77	-9.66
	07/20/2006		15.75	-2.64
	08/17/2006		23.61	-10.50
	09/14/2006		16.30	-3.19
	10/19/2006		23.01	-9.90
	11/21/2006		15.23	-2.12
	12/21/2006		8.20	4.91
	01/18/2007		4.21	8.90
	02/06/2007		12.54	0.57
	03/08/2007		11.42	1.69
	04/12/2007		23.98	-10.87
	05/10/2007		19.18	-6.07
	06/07/2007		6.48	6.63
	07/19/2007		5.78	7.33
	08/09/2007		21.74	-8.63
	09/14/2007		5.89	7.22
	10/12/2007		4.24	8.87
	11/09/2007		4.06	9.05
	12/14/2007		3.23	9.88
	01/17/2008		23.21	-10.10
	02/21/2008		2.98	10.13
	03/20/2008		4.80	8.31
	04/10/2008		23.17	-10.06
	05/08/2008		22.41	-9.30
	06/12/2008		20.70	-7.59
	07/24/2008		20.30	-7.19
	08/14/2008		17.24	-4.13
	09/18/2008		20.11	-7.00
	10/22/2008		20.33	-7.22
	11/13/2008		20.50	-7.39
	12/04/2008		20.87	-7.76
	01/08/2009		20.50	-7.39
	02/11/2009		20.51	-7.40

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-4	03/12/2009	13.11	21.03	-7.92
	04/09/2009		22.61	-9.50
	05/20/2009		18.42	-5.31
	06/17/2009		10.52	2.59
	07/16/2009		20.18	-7.07
	08/13/2009		20.58	-7.47
	09/10/2009		20.09	-6.98
	10/16/2009		22.13	-9.04
	11/12/2009		22.28	-9.17
	12/03/2009		21.96	-8.85
	01/14/2010		22.02	-8.91
	02/18/2010		21.96	-8.85
	03/25/2010		21.51	-8.40
	04/23/2010		21.58	-8.47
	05/21/2010		21.70	-8.59
	06/10/2010		21.65	-8.54
	07/23/2010		21.70	-8.59
	08/12/2010		21.61	-8.50
	09/10/2010		21.38	-8.27
	10/15/2010		21.38	-8.28
	11/04/2010		21.43	-8.32
	12/03/2010		21.42	-8.31
	01/28/2011		22.42	-9.31
	02/10/2011		22.40	-9.29
	03/31/2011		22.56	-9.45
	04/19/2011		8.90	4.21
EX-5	09/28/1998	13.04	6.89	6.89
	10/16/1998		7.03	6.75
	01/08/1999		4.90	8.14
	04/16/1999		6.20	6.84
	06/21/1999		15.88	-2.84
	07/12/1999		7.31	5.73
	10/08/1999		16.00	-2.96
	01/17/2000		9.05	3.99
	04/25/2000		2.82	10.22
	05/30/2000		NM	NM
	06/26/2000		NM	NM
	08/10/2000		15.72	-2.68
	10/06/2000		6.46	6.58
	01/15/2001		4.31	8.73
	04/19/2001		3.21	9.83
	07/02/2001		5.36	7.68
	09/07/2001		NM	NM
	10/18/2001		6.00	7.04
	11/02/2001		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-5	12/14/2001	13.04	1.61	11.43
	01/18/2002		2.40	10.64
	02/21/2002		NM	NM
	03/25/2002		8.02	5.02
	04/18/2002		5.64	7.40
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		16.95	-3.91
	08/15/2002		17.30	-4.26
	09/11/2002		NM	NM
	10/08/2002		16.01	-2.97
	11/07/2002		17.25	-4.21
	12/12/2002		7.42	5.62
	01/13/2003		10.88	2.16
	02/26/2003		5.40	7.64
	03/19/2003		11.21	1.83
	04/14/2003		11.80	1.24
	05/13/2003		9.46	3.58
	06/13/2003		11.70	1.34
	07/07/2003		6.63	6.41
	08/13/2003		12.27	0.77
	09/17/2003		7.60	5.44
	10/27/2003		6.60	6.44
	11/18/2003		6.15	6.89
	12/19/2003		7.73	5.31
	01/15/2004		7.75	5.29
	02/17/2004		6.60	6.44
	03/18/2004		9.15	3.89
	04/21/2004		11.88	1.16
	05/18/2004		12.97	7.00
	06/11/2004		10.80	2.24
	07/13/2004		13.05	-10.00
	08/12/2004		13.45	-0.41
	09/16/2004		11.20	1.84
	10/12/2004		5.90	7.14
	11/17/2004		12.61	0.43
	12/15/2004		5.98	7.06
	01/25/2005		5.20	7.84
	02/15/2005		10.37	-0.30
	03/15/2005		4.90	8.14
	04/25/2005		5.24	7.80
	05/20/2005		8.08	4.96
	06/21/2005		9.70	3.34
	07/20/2005		9.81	3.23
	08/19/2005		19.59	-6.55

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-5	09/16/2005	13.04	9.21	3.83
	10/21/2005		13.55	-0.51
	11/18/2005		8.41	4.63
	12/16/2005		6.95	6.09
	01/20/2006		4.00	9.04
	02/22/2006		8.55	4.49
	03/30/2006		4.80	8.24
	04/27/2006		4.50	8.54
	05/18/2006		19.78	-6.74
	06/22/2006		7.47	5.57
	07/20/2006		11.89	1.15
	08/17/2006		19.36	-6.32
	09/14/2006		7.13	5.91
	10/19/2006		6.25	6.79
	11/21/2006		10.05	2.99
	12/21/2006		3.70	9.34
	01/18/2007		5.65	7.39
	02/06/2007		8.20	4.84
	03/08/2007		5.02	8.02
	04/12/2007		15.92	-2.88
	05/10/2007		5.99	7.05
	06/07/2007		6.92	6.12
	07/19/2007		7.65	5.39
	08/09/2007		7.38	5.66
	09/14/2007		5.88	7.16
	10/12/2007		4.87	8.17
	11/09/2007		3.62	9.42
	12/14/2007		3.96	9.08
	01/17/2008		5.07	7.97
	02/21/2008		5.71	7.33
	03/20/2008		9.15	3.89
	04/10/2008		16.31	-3.27
	05/08/2008		16.97	-3.93
	06/12/2008		16.90	-3.86
	07/24/2008		17.15	-4.11
	08/14/2008		17.20	-4.16
	09/18/2008		17.25	-4.21
	10/22/2008		17.09	-4.05
	11/13/2008		16.80	-3.76
	12/04/2008		16.66	-3.62
	01/08/2009		6.05	6.99
	02/11/2009		6.42	6.62
	03/12/2009		18.05	-5.01
	04/09/2009		7.72	5.32
	05/20/2009		19.47	-6.43

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-5	06/17/2009	13.04	13.70	-0.66
	07/16/2009		19.28	-6.24
	08/13/2009		12.02	1.02
	09/10/2009		19.12	-6.08
	10/16/2009		4.39	8.63
	11/12/2009		16.02	-2.98
	12/03/2009		7.75	5.29
	01/14/2010		16.94	-3.90
	02/18/2010		5.90	7.14
	03/25/2010		12.30	0.74
	04/23/2010		7.40	5.64
	05/21/2010		19.67	-6.63
	06/10/2010		5.81	7.23
	07/23/2010		17.49	-4.45
	08/12/2010		17.30	-4.26
	09/10/2010		16.96	-3.92
	10/15/2010		16.91	-3.88
	11/04/2010		16.16	-3.12
	12/03/2010		13.70	-0.66
	01/28/2011		5.80	7.24
	02/10/2011		15.90	-2.86
	03/31/2011		5.11	7.93
	04/19/2011		5.73	7.31
EX-6	09/28/1998	12.46	5.93	7.05
	10/16/1998		6.07	6.91
	01/08/1999		3.70	8.76
	04/16/1999		4.45	8.01
	06/21/1999		15.65	-3.19
	07/12/1999		9.60	2.86
	10/08/1999		15.55	-3.09
	01/17/2000		15.58	-3.12
	04/25/2000		2.31	10.15
	05/30/2000		3.45	9.01
	06/26/2000		NM	NM
	08/10/2000		9.00	3.46
	10/06/2000		6.45	6.01
	01/15/2001		4.44	8.02
	04/19/2001		2.81	9.65
	07/02/2001		5.91	6.55
	09/07/2001		NM	NM
	10/18/2001		5.50	6.96
	11/02/2001		NM	NM
	12/14/2001		1.00	11.46
	01/18/2002		3.25	9.21
	02/21/2002		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-6	03/25/2002	12.46	4.26	8.20
	04/18/2002		15.50	-3.04
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		10.90	1.56
	08/15/2002		4.71	7.75
	09/11/2002		5.42	7.04
	10/08/2002		5.21	7.25
	11/07/2002		15.65	-3.19
	12/12/2002		15.91	-3.45
	01/13/2003		3.12	9.34
	02/26/2003		3.46	9.00
	03/19/2003		NM	NM
	04/14/2003		12.10	0.36
	05/13/2003		14.75	-2.29
	06/13/2003		15.85	-3.39
	07/07/2003		16.36	-3.90
	08/13/2003		15.91	-3.45
	09/17/2003		15.46	-3.00
	10/27/2003		15.95	-3.49
	11/18/2003		15.81	-3.35
	12/19/2003		15.70	-3.24
	01/15/2004		12.05	0.41
	02/17/2004		9.79	-0.30
	03/18/2004		4.79	7.67
	04/21/2004		15.85	-3.39
	05/18/2004		13.20	-0.74
	06/11/2004		14.70	-2.24
	07/15/2004		13.30	-0.84
	08/12/2004		13.10	-0.64
	09/16/2004		5.70	6.76
	10/12/2004		5.20	7.26
	11/17/2004		16.10	-3.64
	12/15/2004		4.80	7.66
	01/25/2005		5.19	7.27
	02/15/2005		9.25	3.21
	03/15/2005		4.12	8.34
	04/25/2005		7.27	5.19
	05/20/2005		5.90	6.56
	06/21/2005		18.90	-6.44
	07/20/2005		9.18	3.28
	08/19/2005		9.32	3.14
	09/16/2005		19.28	-6.82
	10/21/2005		18.90	-6.44
	11/18/2005		8.53	3.93

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-6	12/16/2005	12.46	5.99	6.47
	01/20/2006		4.70	7.76
	02/22/2006		7.00	5.46
	03/30/2006		NM	NM
	04/27/2006		NM	NM
	05/18/2006		16.19	-3.73
	06/22/2006		5.59	6.87
	07/20/2006		5.51	6.95
	08/17/2006		11.52	0.94
	09/14/2006		6.54	5.92
	10/19/2006		6.48	5.98
	11/21/2006		6.50	5.96
	12/21/2006		5.50	6.96
	01/18/2007		19.54	-7.08
	02/06/2007		9.28	3.18
	03/08/2007		3.18	9.28
	04/12/2007		15.43	-2.97
	05/10/2007		4.34	8.12
	06/07/2007		6.75	5.71
	07/19/2007		7.03	5.43
	08/09/2007		7.63	4.83
	09/14/2007		5.12	7.34
	10/12/2007		4.17	8.29
	11/09/2007		3.15	9.31
	12/14/2007		14.72	-2.26
	01/17/2008		6.61	5.85
	02/21/2008		5.73	6.73
	03/20/2008		16.08	-3.62
	04/10/2008		8.66	3.80
	05/08/2008		16.70	-4.24
	06/12/2008		15.30	-2.84
	07/24/2008		15.75	-3.29
	08/14/2008		16.20	-3.74
	09/18/2008		11.60	0.86
	10/22/2008		13.81	-1.35
	11/13/2008		16.60	-4.14
	12/04/2008		16.38	-3.92
	01/08/2009		12.20	0.26
	02/11/2009		6.48	5.98
	03/12/2009		16.70	-4.24
	04/09/2009		13.41	-0.95
	05/20/2009		16.60	-4.14
	06/17/2009		13.05	-0.59
	07/16/2009		15.79	-3.33
	08/13/2009		16.35	-3.89

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-6	09/10/2009	12.46	16.47	-4.01
	10/16/2009		16.39	-3.95
	11/12/2009		16.33	-3.87
	12/03/2009		16.17	-3.71
	01/14/2010		13.84	-1.38
	02/18/2010		16.66	-4.20
	03/25/2010		19.38	-6.92
	04/23/2010		5.89	6.57
	05/21/2010		15.46	-3.00
	06/10/2010		11.71	0.75
	07/23/2010		14.12	-1.66
	08/12/2010		16.39	-3.93
	09/10/2010		16.42	-3.96
	10/15/2010		16.95	-4.50
	11/04/2010		16.64	-4.18
	12/03/2010		7.40	5.06
	01/28/2011		13.30	-0.84
	02/10/2011		5.90	6.56
	03/31/2011		17.15	-4.69
	04/19/2011		19.15	-6.69
EX-7	09/28/1998	14.02	5.83	8.58
	10/16/1998		5.95	8.46
	01/08/1999		12.38	1.64
	04/16/1999		15.38	-1.36
	06/21/1999		14.20	-0.18
	07/12/1999		15.48	-1.46
	10/08/1999		15.75	-1.73
	01/17/2000		5.80	8.22
	04/25/2000		3.55	10.47
	05/30/2000		4.90	9.12
	06/26/2000		NM	NM
	08/10/2000		16.00	-1.98
	10/06/2000		9.45	4.57
	01/15/2001		15.43	-1.41
	04/19/2001		15.24	-1.22
	07/02/2001		6.20	7.82
	09/07/2001		NM	NM
	10/18/2001		10.56	3.46
	11/02/2001		NM	NM
	12/14/2001		15.45	-1.43
	01/18/2002		5.50	8.52
	02/21/2002		NM	NM
	03/25/2002		15.45	-1.43
	04/18/2002		15.56	-1.54
	05/10/2002		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-7	06/04/2002	14.02	NM	NM
	07/10/2002		11.85	2.17
	08/15/2002		14.50	-0.48
	09/11/2002		10.01	4.01
	10/08/2002		12.31	1.71
	11/07/2002		14.39	-0.37
	12/12/2002		9.22	4.80
	01/13/2003		13.64	0.38
	02/26/2003		11.56	2.46
	03/19/2003		12.01	2.01
	04/14/2003		11.55	2.47
	05/13/2003		11.65	2.37
	06/13/2003		7.30	6.72
	07/07/2003		11.61	2.41
	08/13/2003		13.31	0.71
	09/17/2003		13.27	0.75
	10/27/2003		13.27	0.75
	11/18/2003		12.69	1.33
	12/19/2003		11.40	-5.30
	01/15/2004		10.37	3.65
	02/17/2004		13.05	0.97
	03/18/2004		11.38	-3.30
	04/21/2004		13.28	0.74
	05/18/2004		13.20	0.82
	06/10/2004		12.40	1.62
	07/13/2004		13.13	0.89
	08/12/2004		12.10	1.92
	09/16/2004		13.10	0.92
	10/12/2004		4.98	9.04
	11/17/2004		10.28	3.74
	12/15/2004		12.20	1.82
	01/25/2005		9.12	4.90
	02/15/2005		12.38	1.64
	03/15/2005		18.10	-4.08
	04/25/2005		6.65	7.37
	05/20/2005		4.10	9.92
	06/21/2005		5.75	8.27
	07/20/2005		19.50	-5.48
	08/19/2005		19.20	-5.18
	09/16/2005		18.55	-4.53
	10/21/2005		18.30	-4.28
	11/18/2005		4.64	9.38
	12/16/2005		19.50	-5.48
	01/20/2006		4.70	9.32
	02/22/2006		19.40	-5.38

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-7	03/30/2006	14.02	19.42	-5.40
	04/27/2006		19.44	-5.42
	05/18/2006		19.63	-5.61
	06/22/2006		8.12	5.90
	07/20/2006		10.62	3.40
	08/17/2006		19.35	-5.33
	09/14/2006		19.29	-5.27
	10/19/2006		19.30	-5.28
	11/21/2006		18.90	-4.88
	12/21/2006		9.70	4.32
	01/18/2007		8.59	5.43
	02/06/2007		11.49	2.53
	03/08/2007		19.11	-5.09
	04/12/2007		16.94	-2.92
	05/10/2007		9.75	4.27
	06/07/2007		11.60	2.42
	07/19/2007		15.60	-1.58
	08/09/2007		19.22	-5.20
	09/14/2007		4.68	9.34
	10/05/2007		4.31	9.71
	10/12/2007		2.33	11.69
	10/26/2007		3.59	10.43
	11/02/2007		3.71	10.31
	11/09/2007		3.79	10.23
	12/14/2007		8.70	5.32
	01/17/2008		8.32	5.70
	02/21/2008		16.55	-2.53
	03/20/2008		16.34	-2.32
	04/10/2008		9.57	4.45
	05/08/2008		17.55	-3.53
	06/12/2008		17.41	-3.39
	07/24/2008		15.05	-1.03
	08/14/2008		17.68	-3.66
	09/18/2008		17.35	-3.33
	10/22/2008		17.67	-3.65
	11/13/2008		17.26	-3.24
	12/04/2008		17.00	-2.98
	01/08/2009		17.07	-3.05
	02/11/2009		17.60	-3.58
	03/12/2009		18.71	-4.69
	04/09/2009		18.75	-4.73
	05/20/2009		9.83	4.19
	06/17/2009		12.86	1.16
	07/16/2009		19.02	-5.00
	08/13/2009		18.89	-4.87

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-7	09/10/2009	14.02	19.01	-4.99
	10/16/2009		7.65	6.35
	11/12/2009		19.30	-5.28
	12/03/2009		14.41	-0.39
	01/14/2010		18.73	-4.71
	02/18/2010		10.53	3.49
	03/25/2010		19.04	-5.02
	04/23/2010		14.75	-0.73
	05/21/2010		18.76	-4.74
	06/10/2010		11.90	2.12
	07/23/2010		17.70	-3.68
	08/12/2010		8.99	5.03
	09/10/2010		19.62	-5.60
	10/15/2010		18.43	-4.42
	11/04/2010		18.55	-4.53
	12/03/2010		17.35	-3.33
	01/28/2011		8.70	5.32
	02/10/2011		13.10	0.92
	03/31/2011		19.45	-5.43
	04/19/2011		17.70	-3.68
EX-8	09/28/1998	20.15	10.68	8.67
	10/16/1998		10.78	8.57
	01/08/1999		17.00	1.98
	04/16/1999		24.03	-5.05
	06/21/1999		23.98	-5.00
	07/12/1999		24.28	-5.30
	10/08/1999		24.10	-5.12
	01/17/2000		11.60	7.38
	04/25/2000		8.55	10.43
	05/30/2000		21.00	-2.02
	06/26/2000		NM	NM
	08/10/2000		21.90	-2.92
	10/06/2000		12.20	6.78
	01/15/2001		9.57	9.41
	04/19/2001		11.36	7.62
	07/02/2001		12.09	6.89
	09/07/2001		NM	NM
	10/18/2001		11.81	7.17
	11/02/2001		NM	NM
	12/14/2001		7.18	11.80
	01/18/2002		8.40	10.58
	02/21/2002		NM	NM
	03/25/2002		9.18	9.80
	04/18/2002		10.00	8.98
	05/10/2002		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-8	06/04/2002	20.15	NM	NM
	07/10/2002		NM	NM
	08/15/2002		NM	NM
	09/11/2002		13.81	5.17
	10/08/2002		11.91	7.07
	11/07/2002		27.62	-8.64
	12/12/2002		27.41	-8.43
	01/13/2003		21.95	-2.97
	02/26/2003		11.80	7.18
	03/19/2003		20.85	-1.87
	04/14/2003		21.85	-2.87
	05/13/2003		21.79	-2.81
	06/13/2003		9.37	9.61
	07/07/2003		10.60	8.38
	08/13/2003		12.08	6.90
	09/17/2003		21.78	-2.80
	10/27/2003		10.90	8.08
	11/18/2003		21.50	-2.52
	12/19/2003		19.30	-0.32
	01/15/2004		14.50	4.48
	02/17/2004		21.65	-2.67
	03/18/2004		24.73	-5.75
	04/21/2004		21.15	-2.17
	05/18/2004		21.31	-2.33
	06/10/2004		21.40	-2.42
	07/13/2004		21.02	-2.04
	08/12/2004		18.20	0.78
	09/16/2004		18.05	0.93
	10/12/2004		21.30	-2.32
	11/17/2004		21.51	-2.53
	12/15/2004		21.20	-2.22
	01/25/2005		19.48	-0.50
	02/15/2005		19.99	-1.01
	03/15/2005		10.97	8.01
	04/25/2005		8.93	10.05
	05/20/2005		23.65	-4.67
	06/21/2005		21.97	-2.99
	07/20/2005		28.45	-9.47
	08/19/2005		27.35	-8.37
	09/16/2005		27.70	-8.72
	10/21/2005		27.80	-8.82
	11/18/2005		28.42	-9.44
	12/16/2005		20.84	-1.86
	01/20/2006		28.50	-9.52
	02/22/2006		28.30	-9.32

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-8	03/30/2006	20.15	8.54	10.44
	04/27/2006		28.20	-9.22
	05/18/2006		28.25	-9.27
	06/22/2006		27.70	-8.72
	07/20/2006		11.05	7.93
	08/17/2006		27.60	-8.62
	09/14/2006		28.38	-9.40
	10/19/2006		12.40	6.58
	11/21/2006		28.10	-9.12
	12/21/2006		28.40	-9.42
	01/18/2007		24.33	-5.35
	02/06/2007		12.09	6.89
	03/08/2007		26.05	-7.07
	04/12/2007		28.03	-9.05
	05/10/2007		28.16	-9.18
	06/07/2007		28.03	-9.05
	07/19/2007		28.25	-9.27
	08/09/2007		21.84	-2.86
	09/14/2007		9.74	9.24
	10/05/2007		9.22	9.76
	10/12/2007		6.63	12.35
	10/26/2007		8.36	10.62
	11/02/2007		8.49	10.49
	11/09/2007		8.56	10.42
	12/14/2007		11.10	7.88
	01/17/2008		13.95	6.20
	02/21/2008		20.76	-0.61
	03/20/2008		DRY	NM
	04/10/2008		18.67	1.48
	05/08/2008		28.37	-8.22
	06/12/2008		24.75	-4.60
	07/24/2008		25.08	-4.93
	08/14/2008		28.28	-8.13
	09/18/2008		10.89	9.26
	10/22/2008		28.39	-8.24
	11/13/2008		21.54	-1.39
	12/04/2008		25.44	-5.29
	01/08/2009		28.06	-7.91
	02/11/2009		28.44	-8.29
	03/12/2009		28.52	-8.37
	04/09/2009		27.78	-7.63
	05/20/2009		27.84	-7.69
	06/17/2009		27.40	-7.25
	07/16/2009		28.06	-7.91
	08/13/2009		28.02	-7.87

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-8	09/10/2009	20.15	28.07	-7.92
	10/16/2009		28.02	-7.89
	11/12/2009		27.96	-7.81
	12/03/2009		24.09	-3.94
	01/14/2010		27.94	-7.79
	02/18/2010		27.68	-7.53
	03/25/2010		27.60	-7.45
	04/23/2010		27.89	-7.74
	05/21/2010		28.03	-7.88
	06/10/2010		27.93	-7.78
	07/23/2010		28.04	-7.89
	08/12/2010		27.51	-7.36
	09/10/2010		22.43	-2.28
	10/15/2010		27.89	-7.75
	11/04/2010		26.30	-6.15
	12/03/2010		19.82	0.33
	01/28/2011		27.90	-7.75
	02/10/2011		28.20	-8.05
	03/31/2011		28.16	-8.01
	04/19/2011		28.20	-8.05
EX-9	09/28/1998	17.60	11.04	9.60
	10/16/1998		11.17	9.47
	01/08/1999		24.25	-4.10
	04/16/1999		20.00	0.15
	06/21/1999		20.15	0.00
	07/12/1999		11.03	9.12
	10/08/1999		20.31	-0.16
	01/17/2000		20.10	5.00
	04/25/2000		9.65	10.50
	05/30/2000		20.18	-3.00
	06/26/2000		NM	NM
	08/10/2000		11.85	8.30
	10/06/2000		20.10	5.00
	01/15/2001		20.03	0.12
	04/19/2001		10.60	9.55
	07/02/2001		10.80	9.35
	09/07/2001		NM	NM
	10/18/2001		16.65	3.50
	11/02/2001		NM	NM
	12/14/2001		8.60	11.55
	01/18/2002		8.79	11.36
	02/21/2002		NM	NM
	03/25/2002		9.87	10.28
	04/18/2002		10.27	9.88
	05/10/2002		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-9	06/04/2002	17.60	NM	NM
	07/10/2002		NM	NM
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		10.11	10.04
	11/07/2002		21.82	-1.67
	12/12/2002		22.24	-2.09
	01/13/2003		23.20	-3.05
	02/26/2003		23.10	-2.95
	03/19/2003		9.92	10.23
	04/14/2003		22.80	-2.65
	05/13/2003		22.88	-2.73
	06/13/2003		22.85	-2.70
	07/07/2003		22.71	-2.56
	08/13/2003		22.68	-2.53
	09/17/2003		22.59	-2.44
	10/27/2003		22.57	-2.42
	11/18/2003		22.66	-2.51
	12/19/2003		22.65	-2.50
	01/15/2004		22.42	-2.27
	02/17/2004		22.34	-2.19
	03/18/2004		22.44	-2.29
	04/21/2004		22.30	-2.15
	05/18/2004		22.40	-2.25
	06/10/2004		22.40	-2.25
	07/13/2004		22.61	-2.46
	08/12/2004		23.45	-3.30
	09/16/2004		23.00	-2.85
	10/12/2004		21.93	-1.78
	11/17/2004		22.62	-2.47
	12/15/2004		23.25	-3.10
	01/25/2005		23.12	-2.97
	02/15/2005		23.13	-2.98
	03/15/2005		21.49	-1.34
	04/25/2005		23.30	-3.15
	05/20/2005		23.10	-2.95
	06/21/2005		24.48	-4.33
	07/20/2005		23.20	-3.05
	08/19/2005		23.30	-3.15
	09/16/2005		23.22	-3.07
	10/21/2005		23.22	-3.07
	11/18/2005		23.04	-2.89
	12/16/2005		23.01	-2.86
	01/20/2006		21.90	-1.75
	02/22/2006		22.95	-2.80

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-9	03/30/2006	17.60	21.42	-1.27
	04/27/2006		22.62	-2.47
	05/18/2006		22.75	-2.60
	06/22/2006		20.25	-10.00
	07/20/2006		21.49	-1.34
	08/17/2006		18.10	2.05
	09/14/2006		20.83	-0.68
	10/19/2006		21.60	-1.45
	11/21/2006		21.50	-1.35
	12/21/2006		22.40	-2.25
	01/18/2007		22.43	-2.28
	02/06/2007		22.43	-2.28
	03/08/2007		11.83	8.32
	04/12/2007		13.12	7.03
	05/10/2007		15.24	4.91
	06/07/2007		10.98	9.17
	07/19/2007		20.62	-0.47
	08/09/2007		20.67	-0.52
	09/14/2007		9.73	10.42
	10/05/2007		9.70	10.45
	10/12/2007		9.28	10.87
	10/26/2007		9.22	10.93
	11/02/2007		9.36	10.79
	11/09/2007		9.43	10.72
	12/14/2007		23.70	-3.55
	01/17/2008		18.17	-0.57
	02/21/2008		23.47	-5.87
	03/20/2008		16.57	1.03
	04/10/2008		21.26	-3.66
	05/08/2008		21.89	-4.29
	06/12/2008		21.10	-3.50
	07/24/2008		22.50	-4.90
	08/14/2008		22.25	-4.65
	09/18/2008		21.61	-4.01
	10/22/2008		22.39	-4.79
	11/13/2008		22.62	-5.02
	12/04/2008		22.19	-4.59
	01/08/2009		22.03	-4.43
	02/11/2009		22.44	-4.84
	03/12/2009		22.50	-4.90
	04/09/2009		22.78	-5.18
	05/20/2009		18.89	-1.29
	06/17/2009		19.82	-2.22
	07/16/2009		22.95	-5.35
	08/13/2009		22.86	-5.26

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
EX-9	09/10/2009	17.60	22.74	-5.14
	10/16/2009		22.78	-5.20
	11/12/2009		20.49	-2.89
	12/03/2009		15.90	1.70
	01/14/2010		20.23	-2.63
	02/18/2010		20.03	-2.43
	03/25/2010		24.20	-6.60
	04/23/2010		23.36	-5.76
	05/21/2010		23.43	-5.83
	06/10/2010		21.77	-4.17
	07/23/2010		22.24	-4.64
	08/12/2010		11.80	5.80
	09/10/2010		21.70	-4.10
	10/15/2010		21.73	-4.14
	11/04/2010		21.70	-4.10
	12/03/2010		21.44	-3.84
	01/28/2011		24.60	-7.00
	02/10/2011		24.40	-6.80
	03/31/2011		24.20	-6.60
	04/19/2011		24.85	-7.25
LF-1	06/14/1989	19.62	8.56	11.06
	01/10/1990 (a)		8.31	11.31
	01/18/1990 (b)		7.83	11.79
	01/18/1990 (c)		7.84	11.78
	01/30/1991		8.97	10.65
	06/19/1991		8.86	10.76
	12/16/1991		9.07	10.55
	07/10/1992		9.08	10.54
	12/30/1992		8.22	11.40
	06/08/1993		8.89	10.73
	01/05/1994		NM	NM
LF-10	01/10/1990 (a)	13.69	3.36	9.78
	01/18/1990 (b)		2.65	10.49
	01/18/1990 (c)		2.71	10.43
	01/30/1991		4.15	8.87
	06/19/1991		4.13	8.89
	12/16/1991		4.28	8.74
	07/10/1992		4.17	8.85
	12/30/1992		2.70	10.32
	06/08/1993		3.87	9.15
	01/05/1994		3.72	9.30
	04/24/1996		5.10	8.59
	07/29/1996		NM	NM
	12/13/1996		3.68	10.01
	04/15/1997		4.67	9.02

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-10	09/19/1997	13.69	4.65	9.04
	12/03/1997		4.05	9.64
	12/15/1997		2.81	10.88
	01/13/1998		1.77	11.92
	01/30/1998		1.95	11.74
	02/24/1998		2.13	11.56
	04/06/1998		4.36	9.33
	07/02/1998		6.16	7.53
	07/13/1998		6.26	7.43
	09/28/1998		6.83	6.86
	10/16/1998		7.00	6.69
	01/08/1999		4.96	8.73
	04/16/1999		4.35	9.34
	06/21/1999		8.09	5.60
	07/12/1999		8.04	5.65
	10/08/1999		8.17	5.52
	01/17/2000		7.53	6.16
	04/25/2000		3.53	10.16
	05/30/2000		4.53	9.16
	06/26/2000		NM	NM
	08/10/2000		6.82	6.87
	10/06/2000		6.98	6.71
	01/15/2001		5.11	8.58
	04/19/2001		4.01	9.68
	07/02/2001		6.94	6.75
	09/07/2001		NM	NM
	10/18/2001		6.72	6.97
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		3.55	10.14
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		6.50	7.19
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		5.77	7.92
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		NM	NM
	01/13/2003		4.01	9.68
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		5.89	7.80
	07/07/2003		7.41	6.28
	10/27/2003		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-10	11/18/2003	13.69	NM	NM
	01/15/2004		6.51	7.18
	04/21/2004		6.75	6.94
	07/13/2004		7.32	6.37
	10/12/2004		6.53	7.16
	01/24/2005		4.42	9.27
	04/25/2005		5.55	8.14
	07/20/2005		7.49	6.20
	08/19/2005		9.30	4.39
	10/21/2005		7.78	5.91
	01/20/2006		2.52	11.17
	04/27/2006		4.41	9.28
	07/20/2006		6.97	6.72
	10/19/2006		6.92	6.77
	01/18/2007		5.66	8.03
	04/12/2007		6.71	6.98
	07/19/2007		7.79	5.90
	08/17/2007		7.37	6.32
	08/24/2007		7.11	6.58
	08/30/2007		6.91	6.78
	09/06/2007		6.69	7.00
	09/14/2007		6.50	7.19
	09/21/2007		6.29	7.40
	09/28/2007		6.07	7.62
	10/05/2007		5.97	7.72
	10/12/2007		5.60	8.09
	10/19/2007		4.78	8.91
	10/26/2007		4.59	9.10
	11/02/2007		4.46	9.23
	11/09/2007		4.52	9.17
	11/15/2007		4.03	9.66
	11/21/2007		3.97	9.72
	11/29/2007		4.03	9.66
	01/17/2008		4.65	9.04
	04/10/2008		7.53	6.16
	07/24/2008		7.83	5.86
	10/22/2008		7.98	5.71
	01/08/2009		5.37	8.32
	04/09/2009		5.23	8.46
	07/16/2009		7.19	6.50
	10/16/2009		5.13	8.54
	01/14/2010		6.60	7.09
	04/23/2010		4.80	8.89
	07/23/2010		7.17	6.52
	10/15/2010		7.71	5.97

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-10	01/28/2011	13.69	4.68	9.01
	04/19/2011		5.20	8.49
LF-11	01/10/1990 (a)	12.75	3.18	9.60
	01/18/1990 (b)		2.28	10.50
	01/18/1990 (c)		2.33	10.45
	01/30/1991		3.69	9.09
	06/19/1991		3.68	9.10
	12/16/1991		3.80	8.98
	07/10/1992		3.68	9.10
	12/30/1992		2.33	10.45
	06/08/1993		3.43	9.35
	01/05/1994		3.42	9.36
	04/24/1996		3.19	9.56
	07/29/1996		3.93	8.82
	12/13/1996		4.31	8.44
	04/15/1997		4.76	7.99
	09/19/1997		4.63	8.12
	12/03/1997		4.39	8.36
	12/15/1997		4.28	8.47
	01/13/1998		3.94	8.81
	01/30/1998		4.07	8.68
	02/24/1998		4.00	8.75
	04/06/1998		4.27	8.48
	07/02/1998		4.61	8.14
	07/13/1998		4.63	8.12
	09/28/1998		4.70	8.05
	10/16/1998		4.68	8.07
	01/08/1999		4.25	8.50
	04/16/1999		2.96	9.79
	06/21/1999		4.62	8.13
	07/12/1999		4.60	8.15
	10/08/1999		4.41	8.34
	01/17/2000		4.36	8.39
	04/25/2000		3.71	9.04
	05/30/2000		4.20	8.55
	06/26/2000		NM	NM
	08/10/2000		4.65	8.10
	10/06/2000		4.45	8.30
	01/15/2001		2.74	10.01
	04/19/2001		3.93	8.82
	07/02/2001		4.26	8.49
	09/07/2001		NM	NM
	10/18/2001		4.21	8.54
	11/02/2001		NM	NM
	12/14/2001		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-11	01/18/2002	12.75	3.40	9.35
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		3.93	8.82
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		4.15	8.60
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		4.21	8.54
	01/13/2003		2.34	10.41
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		2.34	10.41
	07/07/2003		4.12	8.63
	10/27/2003		NM	NM
	11/18/2003		3.86	8.89
	01/15/2004		3.30	9.45
	04/21/2004		3.80	8.95
	07/13/2004		4.09	8.66
	10/12/2004		4.13	8.62
	01/24/2005		3.25	9.50
	04/25/2005		3.65	9.10
	07/20/2005		3.97	8.78
	10/21/2005		4.27	8.48
	01/20/2006		1.70	11.05
	04/27/2006		3.26	9.49
	07/20/2006		3.93	8.82
	10/19/2006		4.00	8.75
	01/18/2007		3.68	9.07
	04/12/2007		3.73	9.02
	07/19/2007		4.00	8.75
	10/12/2007		2.63	10.12
	01/17/2008		2.65	10.10
	04/10/2008		3.93	8.82
	07/24/2008		4.48	8.27
	10/22/2008		4.09	8.66
	01/08/2009		3.12	9.63
	04/09/2009		3.33	9.42
	07/16/2009		3.99	8.76
	10/16/2009		2.14	10.59
	01/14/2010		3.13	9.62
	04/23/2010		2.31	10.44
	07/23/2010		3.96	8.79
	10/15/2010		4.11	8.63

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-11	01/28/2011	12.75	3.26	9.49
	04/19/2011		3.18	9.57
LF-12	01/10/1990 (a)	17.65	6.32	11.35
	01/18/1990 (b)		5.86	11.81
	01/18/1990 (c)		5.87	11.80
	01/30/1991		6.95	10.72
	06/19/1991		6.90	10.77
	12/16/1991		7.09	10.58
	07/10/1992		7.08	10.59
	12/30/1992		6.26	11.41
	06/08/1993		6.90	10.77
	01/05/1994		6.98	10.69
	04/24/1996		6.57	11.08
	07/29/1996		7.29	10.36
	12/13/1996		5.69	11.96
	04/15/1997		6.94	10.71
	09/19/1997		7.00	10.65
	12/03/1997		6.12	11.53
	12/15/1997		6.11	11.54
	01/13/1998		5.53	12.12
	01/30/1998		5.85	11.80
	02/24/1998		5.57	12.08
	04/06/1998		6.27	11.38
	07/02/1998		6.95	10.70
	07/13/1998		7.01	10.64
	09/28/1998		7.14	10.51
	10/16/1998		7.31	10.34
	01/08/1999		7.06	10.59
	04/16/1999		6.39	11.26
	06/21/1999		7.16	10.49
	07/12/1999		7.25	10.40
	10/08/1999		7.24	10.41
	01/17/2000		6.81	10.84
	04/25/2000		6.54	11.11
	05/30/2000		6.80	10.85
	06/26/2000		NM	NM
	08/10/2000		7.20	10.45
	10/06/2000		7.19	10.46
	01/15/2001		6.45	11.20
	04/19/2001		6.72	10.93
	07/02/2001		6.94	10.71
	09/07/2001		NM	NM
	10/18/2001		6.84	10.81
	11/02/2001		NM	NM
	12/14/2001		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-12	01/18/2002	17.65	6.23	11.42
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		6.61	11.04
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		6.79	10.86
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		6.83	10.82
	01/13/2003		5.89	11.76
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		6.00	11.65
	07/07/2003		6.65	11.00
	10/27/2003		NM	NM
	11/18/2003		6.60	11.05
	01/15/2004		6.15	11.50
	04/21/2004		6.48	11.17
	07/13/2004		6.79	10.86
	10/12/2004		6.82	10.83
	01/24/2005		6.22	11.43
	04/25/2005		6.31	11.34
	07/20/2005		6.55	11.10
	09/16/2005		6.95	10.70
	10/21/2005		7.11	10.54
	01/20/2006		5.75	11.90
	04/27/2006		6.19	11.46
	07/20/2006		6.65	11.00
	10/19/2006		6.74	10.91
	01/18/2007		6.54	11.11
	04/12/2007		6.51	11.14
	07/19/2007		6.80	10.85
	08/17/2007		NM	NM
	08/24/2007		NM	NM
	08/30/2007		NM	NM
	09/06/2007		NM	NM
	09/14/2007		NM	NM
	09/21/2007		NM	NM
	09/28/2007		NM	NM
	10/05/2007		6.77	10.88
	10/12/2007		6.50	11.15
	10/19/2007		6.34	11.31
	10/26/2007		6.48	11.17
	11/02/2007		6.59	11.06

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-12	11/09/2007	17.65	6.65	11.00
	11/15/2007		7.06	10.59
	11/21/2007		7.02	10.63
	11/29/2007		6.69	10.96
	01/17/2008		6.16	11.49
	04/10/2008		6.77	10.88
	07/24/2008		7.02	10.63
	10/22/2008		7.05	10.60
	01/08/2009		6.29	11.36
	04/09/2009		6.26	11.39
	07/16/2009		6.76	10.89
	10/16/2009		6.09	11.54
	01/14/2010		6.30	11.35
	04/23/2010		6.08	11.57
	07/23/2010		6.66	10.99
	10/15/2010		6.89	10.75
	01/28/2011		6.37	11.28
	04/19/2011		6.31	11.34
	10/05/2011		9.95	7.70
	10/12/2011		NM	NM
	10/19/2011		10.61	7.04
	10/26/2011		NM	NM
	11/02/2011		9.99	7.66
	11/09/2011		NM	NM
	11/16/2011		8.42	9.23
	11/23/2011		NM	NM
	11/30/2011		8.06	9.59
	12/06/2011		NM	NM
	01/27/2012		6.82	10.83
	02/23/2012		6.82	10.83
	03/20/2012		6.02	11.63
	04/16/2012		5.87	11.78
	05/14/2012		6.51	11.14
	06/11/2012		6.75	10.90
	07/18/2012		6.76	10.89
	08/15/2012		6.82	10.83
	09/13/2012		6.90	10.75
	10/17/2012		6.92	10.73
	11/16/2012		6.51	11.14
	12/14/2012		5.99	11.66
	01/18/2013		6.25	11.40
	02/22/2013		6.40	11.25
	03/21/2013		6.24	11.41
	04/19/2013		6.21	11.44
	07/16/2013		6.87	10.78

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-12	10/07/2013	17.65	7.19	10.46
	01/03/2014		7.14	10.51
	04/22/2014		6.59	11.06
	07/08/2014		7.02	10.63
	10/28/2014		7.05	10.60
LF-13	01/10/1990 (a)	17.48	6.12	11.34
	01/18/1990 (b)		5.69	11.77
	01/18/1990 (c)		5.72	11.74
	01/30/1991		6.70	10.76
	06/19/1991		6.60	10.86
	12/16/1991		6.76	10.70
	07/10/1992		6.68	10.78
	12/30/1992		5.93	11.53
	06/08/1993		6.52	10.94
	01/05/1994		6.62	10.84
	04/24/1996		6.21	11.27
	07/29/1996		6.96	10.52
	12/13/1996		5.50	11.98
	04/15/1997		6.71	10.77
	09/19/1997		6.76	10.72
	12/03/1997		NM	NM
	12/15/1997		NM	NM
	01/13/1998		5.22	12.26
	01/30/1998		5.53	11.95
	02/24/1998		5.31	12.17
	04/06/1998		5.91	11.57
	07/02/1998		6.50	10.98
	07/13/1998		6.54	10.94
	09/28/1998		6.73	10.75
	10/16/1998		6.89	10.59
	01/08/1999		6.64	10.84
	04/16/1999		5.94	11.54
	06/21/1999		6.70	10.78
	07/12/1999		6.78	10.70
	10/08/1999		6.78	10.70
	01/17/2000		6.32	11.16
	04/25/2000		6.13	11.35
	05/30/2000		6.39	11.09
	06/26/2000		NM	NM
	08/10/2000		6.75	10.73
	10/06/2000		6.75	10.73
	01/15/2001		6.01	11.47
	04/19/2001		6.31	11.17
	07/02/2001		6.51	10.97
	08/10/2001		6.42	11.06

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-13	09/07/2001	17.48	NM	NM
	10/18/2001		6.43	11.05
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		5.95	11.53
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		6.22	11.26
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		6.43	11.05
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		6.45	11.03
	01/13/2003		5.61	11.87
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		5.60	11.88
	07/07/2003		7.21	10.27
	10/27/2003		NM	NM
	11/18/2003		6.19	11.29
	01/15/2004		6.77	10.71
	04/21/2004		6.05	11.43
	07/13/2004		6.36	11.12
	10/12/2004		13.70	3.78
	01/24/2005		5.80	11.68
	04/25/2005		5.96	11.52
	07/20/2005		6.28	11.20
	09/16/2005		6.45	11.03
	10/21/2005		6.59	10.89
	01/20/2006		5.61	11.87
	04/27/2006		6.85	10.63
	07/20/2006		6.28	11.20
	10/19/2006		6.36	11.12
	01/18/2007		6.14	11.34
	04/12/2007		6.08	11.40
	07/19/2007		6.42	11.06
	10/12/2007		5.97	11.51
	01/17/2008		5.79	11.69
	04/10/2008		6.35	11.13
	07/24/2008		6.73	10.75
	10/22/2008		6.70	10.78
	01/08/2009		5.87	11.61
	04/09/2009		5.81	11.67
	07/16/2009		7.18	10.30

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-13	10/16/2009	17.48	5.61	11.85
	01/14/2010		6.93	10.55
	04/23/2010		5.73	11.75
	07/23/2010		6.36	11.12
	10/15/2010		6.54	10.93
	01/28/2011		6.07	11.41
	04/19/2011		5.96	11.52
	10/05/2011		7.29	10.19
	10/12/2011		NM	NM
	10/19/2011		7.86	9.62
	10/26/2011		NM	NM
	11/02/2011		8.06	9.42
	11/09/2011		NM	NM
	11/16/2011		7.53	9.95
	11/23/2011		NM	NM
	11/30/2011		7.24	10.24
	12/06/2011		NM	NM
	01/27/2012		5.96	11.52
	02/23/2012		6.20	11.28
	03/20/2012		5.35	12.13
	04/16/2012		5.35	12.13
	05/14/2012		5.96	11.52
	06/11/2012		6.31	11.17
	07/18/2012		6.20	11.28
	08/15/2012		6.26	11.22
	09/13/2012		6.35	11.13
	10/17/2012		6.41	11.07
	11/16/2012		6.00	11.48
	12/14/2012		5.50	11.98
	01/18/2013		5.85	11.63
	02/22/2013		6.05	11.43
	03/21/2013		6.02	11.46
	04/19/2013		5.94	11.54
	07/16/2013		6.35	11.13
	10/07/2013		6.56	10.92
	01/03/2014		6.59	10.89
	04/22/2014		6.04	11.44
	07/08/2014		6.43	11.05
	10/28/2014		6.53	10.95
LF-14	01/30/1991	12.73	5.89	6.84
	06/19/1991		5.87	6.86
	12/16/1991		5.99	6.74
	07/10/1992		5.74	6.99
	12/30/1992		4.38	8.35
	06/08/1993		5.45	7.28

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-14	01/05/1994	12.73	NM	NM
LF-15	01/30/1991	12.50	5.02	7.48
	06/19/1991		4.83	7.67
	12/16/1991		5.02	7.48
	07/10/1992		4.83	7.67
	12/30/1992		3.44	9.06
	06/08/1993		4.40	8.10
	01/05/1994		NM	NM
LF-16	01/30/1991	12.80	4.68	8.12
	06/19/1991		4.53	8.27
	12/16/1991		4.71	8.09
	07/10/1992		4.56	8.24
	12/30/1992		3.46	9.34
	06/08/1993		4.17	8.63
	01/05/1994		NM	NM
LF-17	04/24/1996	15.26	5.35	9.88
	07/29/1996		6.10	9.13
	12/13/1996		2.59	12.64
	04/15/1997		4.04	11.19
	09/19/1997		4.00	11.23
	12/03/1997		4.55	10.68
	12/15/1997		3.79	11.44
	01/13/1998		2.45	12.78
	01/30/1998		2.80	12.43
	02/24/1998		2.40	12.83
	04/06/1998		4.13	11.10
	07/02/1998		6.21	9.02
	07/13/1998		6.40	8.86
	09/28/1998		6.51	8.75
	10/16/1998		6.68	8.58
	01/08/1999		6.80	8.46
	04/16/1999		6.34	8.92
	06/21/1999		8.01	7.25
	07/12/1999		8.15	7.11
	10/08/1999		8.00	7.26
	01/17/2000		6.70	8.56
	04/25/2000		4.71	10.55
	05/30/2000		5.84	9.42
	06/26/2000		NM	NM
	08/10/2000		6.90	8.36
	10/06/2000		6.62	8.64
	01/15/2001		5.84	9.42
	04/19/2001		5.00	10.26
	07/02/2001		6.79	8.47

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-17	09/07/2001	15.26	NM	NM
	10/18/2001		6.29	8.97
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		4.91	10.35
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		7.09	8.17
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		7.19	8.07
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		6.12	9.14
	01/13/2003		4.33	10.93
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		4.80	10.46
	07/07/2003		6.34	8.92
	10/27/2003		NM	NM
	11/18/2003		6.11	9.15
	01/15/2004		5.95	9.31
	04/21/2004		6.84	8.42
	07/13/2004		7.22	8.04
	10/12/2004		6.50	8.76
	01/24/2005		5.36	9.90
	04/25/2005		5.11	10.15
	07/20/2005		7.15	8.11
	10/21/2005		7.44	7.82
	01/20/2006		3.62	11.64
	04/27/2006		5.99	9.27
	07/20/2006		6.20	9.06
	10/19/2006		5.70	9.56
	01/18/2007		5.64	9.62
	04/12/2007		6.39	8.87
	07/19/2007		6.43	8.83
	08/17/2007		6.70	8.56
	08/24/2007		6.45	8.81
	08/30/2007		6.16	9.10
	09/06/2007		5.95	9.31
	09/14/2007		5.75	9.51
	09/21/2007		5.53	9.73
	09/28/2007		5.26	10.00
	10/05/2007		5.30	9.96
	10/12/2007		4.31	10.95

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-17	10/19/2007	15.26	4.21	11.05
	10/26/2007		4.47	10.79
	11/02/2007		4.64	10.62
	11/09/2007		4.79	10.47
	11/15/2007		4.02	11.24
	11/21/2007		4.41	10.85
	11/29/2007		4.63	10.63
	01/17/2008		5.01	10.25
	04/10/2008		6.28	8.98
	07/24/2008		7.49	7.77
	10/22/2008		6.63	8.63
	01/08/2009		4.71	10.55
	04/09/2009		5.43	9.83
	07/16/2009		6.49	8.77
	10/16/2009		4.63	10.61
	01/14/2010		5.42	9.84
	04/23/2010		4.45	10.81
	07/23/2010		6.60	8.66
	10/15/2010		6.80	8.45
	01/28/2011		4.90	10.36
	04/19/2011		5.38	9.88
LF-18	04/24/1996	15.75	8.21	7.54
	07/29/1996		8.65	7.10
	12/13/1996		6.44	9.31
	04/15/1997		8.50	7.25
	09/19/1997		8.31	7.44
	12/03/1997		7.32	8.43
	12/15/1997		7.02	8.73
	01/13/1998		5.89	9.86
	01/30/1998		6.32	9.43
	02/24/1998		6.34	9.41
	04/06/1998		7.49	8.26
	07/02/1998		8.51	7.24
	07/13/1998		8.39	7.36
	09/28/1998		8.62	7.13
	10/16/1998		8.75	7.00
	01/08/1999		8.62	7.13
	04/16/1999		7.63	8.12
	06/21/1999		8.71	7.04
	07/12/1999		8.61	7.14
	10/08/1999		9.25	6.50
	01/17/2000		8.28	7.47
	04/25/2000		7.97	7.78
	05/30/2000		8.42	7.33
	06/26/2000		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-18	08/10/2000	15.75	8.99	6.76
	10/06/2000		9.01	6.74
	01/15/2001		7.99	7.76
	04/19/2001		8.15	7.60
	07/02/2001		8.89	6.86
	09/07/2001		NM	NM
	10/18/2001		8.97	6.78
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		7.50	8.25
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		8.67	7.08
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		8.71	7.04
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		8.45	7.30
	01/13/2003		6.93	8.82
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		7.59	8.16
	07/07/2003		8.86	6.89
	10/27/2003		NM	NM
	11/18/2003		8.85	6.90
	01/15/2004		8.03	7.72
	04/21/2004		8.88	6.87
	07/13/2004		9.10	6.65
	10/12/2004		9.55	6.20
	01/24/2005		7.82	7.93
	04/25/2005		8.24	7.51
	07/20/2005		8.95	6.80
	10/21/2005		9.46	6.29
	01/20/2006		7.49	8.26
	04/27/2006		7.90	7.85
	07/20/2006		8.78	6.97
	10/19/2006		9.07	6.68
	01/18/2007		8.64	7.11
	04/12/2007		8.77	6.98
	07/19/2007		9.25	6.50
	08/17/2007		9.39	6.36
	08/24/2007		9.32	6.43
	08/30/2007		9.24	6.51
	09/06/2007		9.26	6.49

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-18	09/14/2007	15.75	9.40	6.35
	09/21/2007		9.39	6.36
	09/28/2007		9.01	6.74
	10/05/2007		9.22	6.53
	10/12/2007		8.11	7.64
	10/19/2007		8.80	6.95
	10/26/2007		8.70	7.05
	11/02/2007		9.02	6.73
	11/09/2007		8.91	6.84
	11/15/2007		8.43	7.32
	11/21/2007		8.43	7.32
	11/29/2007		8.50	7.25
	01/17/2008		7.97	7.78
	04/10/2008		9.15	6.60
	07/24/2008		9.80	5.95
	10/22/2008		9.98	5.77
	01/08/2009		9.35	6.40
	04/09/2009		8.51	7.24
	07/16/2009		9.40	6.35
	10/16/2009		8.32	7.41
	01/14/2010		8.87	6.88
	04/23/2010		8.27	7.48
	07/23/2010		9.14	6.61
	10/15/2010		9.63	6.11
	01/28/2011		8.60	7.15
	04/19/2011		8.48	7.27
	03/20/2012		9.33	6.42
	04/16/2012		9.85	5.90
	05/14/2012		9.90	5.85
	06/11/2012		10.26	5.49
	07/18/2012		10.08	5.67
	08/15/2012		10.15	5.60
	09/13/2012		10.37	5.38
	10/17/2012		10.32	5.43
	11/16/2012		9.80	5.95
	12/14/2012		8.62	7.13
	01/18/2013		9.70	6.05
	02/22/2013		9.90	5.85
	03/21/2013		9.95	5.80
	04/19/2013		9.76	5.99
	07/16/2013		10.08	5.67
	10/07/2013		10.38	5.37
	01/03/2014		9.96	5.79
	04/22/2014		9.64	6.11
	07/08/2014		9.98	5.77

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-18	10/28/2014	15.75	10.07	5.68
LF-19	04/24/1996	16.88	7.92	8.96
	07/29/1996		7.76	9.12
	12/13/1996		4.85	12.03
	04/15/1997		7.36	9.52
	09/19/1997		7.69	9.19
	12/03/1997		6.80	10.08
	12/15/1997		7.86	9.02
	01/13/1998		NM	NM
	01/30/1998		6.01	10.87
	02/24/1998		5.28	11.60
	04/06/1998		6.51	10.37
	07/02/1998		7.17	9.71
	07/13/1998		7.32	9.56
	09/28/1998		7.60	9.28
	10/16/1998		7.70	9.18
	01/08/1999		7.48	9.40
	04/16/1999		6.44	10.44
	06/21/1999		7.57	9.31
	07/12/1999		7.83	9.05
	10/08/1999		7.96	8.92
LF-2	06/14/1989	14.94	4.99	9.95
	01/10/1990 (a)		4.65	10.29
	01/18/1990 (b)		3.99	10.95
	01/18/1990 (c)		4.05	10.89
	01/30/1991		5.60	9.34
	06/19/1991		5.57	9.37
	12/16/1991		5.49	9.45
	07/10/1992		NM	NM
	12/30/1992		NM	NM
	06/08/1993		5.11	9.83
	01/05/1994		4.19	10.75
LF-20	04/24/1996	14.47	7.55	6.92
	07/29/1996		7.91	6.56
	12/13/1996		7.71	6.76
	04/15/1997		7.85	6.62
	09/19/1997		7.91	6.56
	12/03/1997		7.58	6.89
	12/15/1997		7.53	6.94
	01/13/1998		7.30	7.17
	01/30/1998		7.42	7.05
	02/24/1998		7.43	7.04
	04/06/1998		7.61	6.86
	07/02/1998		7.81	6.66

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-20	07/13/1998	14.47	7.86	6.61
	09/28/1998		6.98	7.49
	10/16/1998		6.78	7.69
	01/08/1999		6.24	8.23
	04/16/1999		4.89	9.58
	06/21/1999		6.68	7.79
	07/12/1999		6.67	7.80
	10/08/1999		8.01	6.46
	01/17/2000		6.65	7.82
	04/25/2000		5.79	8.68
	05/30/2000		6.27	8.20
	06/26/2000		NM	NM
	08/10/2000		6.75	7.72
	10/06/2000		7.23	7.24
	01/15/2001		5.36	9.11
	04/19/2001		6.68	7.79
	07/02/2001		7.57	6.90
	09/07/2001		NM	NM
	10/18/2001		7.55	6.92
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		6.35	8.12
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		7.14	7.33
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		7.52	6.95
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		7.35	7.12
	01/13/2003		5.45	9.02
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		5.54	8.93
	07/07/2003		7.29	7.18
	10/27/2003		NM	NM
	11/18/2003		7.16	7.31
	01/15/2004		5.58	8.89
	04/21/2004		7.15	7.32
	07/13/2004		7.50	6.97
	10/12/2004		7.29	7.18
	01/24/2005		6.39	8.08
	04/25/2005		6.60	7.87
	07/20/2005		7.07	7.40

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-20	10/21/2005	14.47	7.46	7.01
	01/20/2006		5.35	9.12
	04/27/2006		6.55	7.92
	07/20/2006		7.15	7.32
	10/19/2006		7.16	7.31
	01/18/2007		7.12	7.35
	04/12/2007		7.21	7.26
	07/19/2007		7.67	6.80
	08/17/2007		7.76	6.71
	08/24/2007		7.77	6.70
	08/30/2007		7.78	6.69
	09/06/2007		7.79	6.68
	09/14/2007		7.78	6.69
	09/21/2007		7.75	6.72
	09/28/2007		7.69	6.78
	10/05/2007		7.68	6.79
	10/12/2007		6.97	7.50
	10/19/2007		6.95	7.52
	10/26/2007		7.07	7.40
	11/02/2007		7.11	7.36
	11/09/2007		7.20	7.27
	11/15/2007		6.68	7.79
	11/21/2007		7.01	7.46
	11/29/2007		7.19	7.28
	01/17/2008		6.76	7.71
	04/10/2008		7.53	6.94
	07/24/2008		7.96	6.51
	10/22/2008		7.93	6.54
	01/08/2009		7.03	7.44
	04/09/2009		7.04	7.43
	07/16/2009		7.65	6.82
	10/16/2009		5.66	8.79
	01/14/2010		6.82	7.65
	04/23/2010		6.56	7.91
	07/23/2010		7.61	6.86
	10/15/2010		7.68	6.78
	01/28/2011		7.87	6.60
	04/19/2011		7.63	6.84
LF-21	04/24/1996	13.17	3.65	9.42
	07/29/1996		4.61	8.46
	12/13/1996		5.06	8.01
	04/15/1997		5.58	7.49
	09/19/1997		5.42	7.65
	12/03/1997		5.32	7.75
	12/15/1997		5.27	7.80

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-21	01/13/1998	13.17	5.03	8.04
	01/30/1998		5.04	8.03
	02/24/1998		4.83	8.24
	04/06/1998		5.00	8.07
	07/02/1998		5.35	7.72
	07/13/1998		5.37	7.80
	09/28/1998		5.33	7.84
	10/16/1998		5.24	7.93
	01/08/1999		4.81	8.36
	04/16/1999		3.37	9.80
	06/21/1999		5.22	7.95
	07/12/1999		5.18	7.99
	10/08/1999		5.11	8.06
	01/17/2000		4.92	8.25
	04/25/2000		4.32	8.85
	05/30/2000		4.81	8.36
	06/26/2000		NM	NM
	08/10/2000		5.27	7.90
	10/06/2000		5.18	7.99
	01/15/2001		3.14	10.03
	04/19/2001		4.60	8.57
	07/02/2001		5.02	8.15
	09/07/2001		NM	NM
	10/18/2001		5.00	8.17
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		3.99	9.18
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		4.65	8.52
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		4.87	8.30
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		5.00	8.17
	01/13/2003		2.69	10.48
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		2.50	10.67
	07/07/2003		4.81	8.36
	10/27/2003		NM	NM
	11/18/2003		4.55	8.62
	01/15/2004		3.78	9.39
	04/21/2004		4.50	8.67

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-21	07/13/2004	13.17	4.80	8.37
	10/12/2004		4.83	8.34
	01/24/2005		3.81	9.36
	04/25/2005		4.29	8.88
	07/20/2005		5.67	7.50
	10/21/2005		4.95	8.22
	01/20/2006		2.63	10.54
	04/27/2006		3.75	9.42
	07/20/2006		4.65	8.52
	10/19/2006		4.70	8.47
	01/18/2007		4.31	8.86
	04/12/2007		4.38	8.79
	07/19/2007		4.66	8.51
	08/17/2007 (d)		3.91	9.26
	08/24/2007		4.71	8.46
	08/30/2007		4.72	8.45
	09/06/2007 (d)		3.90	9.27
	09/14/2007 (d)		3.85	9.32
	09/21/2007 (d)		3.74	9.43
	09/28/2007 (d)		3.68	9.49
	10/05/2007		3.66	9.51
	10/12/2007		2.77	10.40
	10/19/2007		3.00	10.17
	10/26/2007		3.82	9.35
	11/02/2007		4.12	9.05
	11/09/2007		5.28	7.89
	11/15/2007		3.00	10.17
	11/21/2007		3.83	9.34
	11/29/2007		4.17	9.00
	01/17/2008		3.05	10.12
LF-22	04/24/1996	21.86	11.55	10.31
	07/29/1996		12.22	9.64
	12/13/1996		9.07	12.79
	04/15/1997		10.14	11.72
	09/19/1997		10.01	11.85
	12/03/1997		10.72	11.14
	12/15/1997		10.40	11.46
	01/13/1998		9.57	12.29
	01/30/1998		9.60	12.26
	02/24/1998		9.08	12.78
	04/06/1998		10.74	11.12
	07/02/1998		12.34	9.52
	07/13/1998		12.58	9.28
	09/28/1998		12.66	9.20
	10/16/1998		12.86	9.00

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-22	01/08/1999	21.86	12.03	9.83
	04/16/1999		11.33	10.53
	06/21/1999		12.71	9.15
	07/12/1999		12.83	9.03
	10/08/1999		13.20	8.66
	01/17/2000		12.41	9.45
	04/25/2000		11.22	10.64
	05/30/2000		12.16	9.70
	06/26/2000		NM	NM
	08/10/2000		12.80	9.06
	10/06/2000		12.70	9.16
	01/15/2001		11.77	10.09
	04/19/2001		11.75	10.11
	07/02/2001		12.63	9.23
	09/07/2001		NM	NM
	10/18/2001		12.28	9.58
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		10.95	10.91
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		12.20	9.66
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		11.93	9.93
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		11.77	10.09
	01/13/2003		10.91	10.95
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		10.90	10.96
	07/07/2003		12.31	9.55
	10/27/2003		NM	NM
	11/18/2003		12.11	9.75
	01/15/2004		11.63	10.23
	04/21/2004		12.07	9.79
	07/13/2004		12.42	9.44
	10/12/2004		11.92	9.94
	01/24/2005		11.20	10.66
	04/25/2005		11.53	10.33
	07/20/2005		12.35	9.51
	10/21/2005		12.65	9.21
	01/20/2006		9.72	12.14
	04/27/2006		11.42	10.44

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-22	07/20/2006	21.86	12.13	9.73
	10/19/2006		11.79	10.07
	01/18/2007		11.74	10.12
	04/12/2007		11.85	10.01
	07/19/2007		12.13	9.73
	08/17/2007		NM	NM
	08/24/2007		NM	NM
	08/30/2007		NM	NM
	09/06/2007		NM	NM
	09/14/2007		NM	NM
	09/21/2007		NM	NM
	09/28/2007		NM	NM
	10/05/2007		11.56	10.30
	10/12/2007		10.65	11.21
	10/19/2007		10.80	11.06
	10/26/2007		10.98	10.88
	11/02/2007		11.14	10.72
	11/09/2007		11.22	10.64
	11/15/2007		10.70	11.16
	11/21/2007		10.96	10.90
	11/29/2007		11.14	10.72
	01/17/2008		10.95	10.91
	04/10/2008		11.95	9.91
	07/24/2008		12.46	9.40
	10/22/2008		12.27	9.59
	01/08/2009		11.17	10.69
	04/09/2009		11.43	10.43
	07/16/2009		12.04	9.82
	10/16/2009		10.90	10.94
	01/14/2010		11.27	10.59
	04/23/2010		10.92	10.94
	07/23/2010		11.81	10.05
	10/15/2010		12.17	9.68
	01/28/2011		11.28	10.58
	04/19/2011		11.42	10.44
LF-23	04/24/1996	13.34	4.08	9.26
	07/29/1996		5.28	8.06
	12/13/1996		3.76	9.58
	04/15/1997		5.51	7.83
	09/19/1997		5.90	7.44
	12/03/1997		4.37	8.97
	12/15/1997		4.08	9.26
	01/13/1998		3.33	10.01
	01/30/1998		3.32	10.02
	02/24/1998		2.75	10.59

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-23	04/06/1998	13.34	3.88	9.46
	07/02/1998		5.30	8.04
	07/13/1998		5.39	7.95
	09/28/1998		5.73	7.61
	10/16/1998		5.69	7.65
	01/08/1999		5.20	8.14
	04/16/1999		4.11	9.23
	06/21/1999		5.76	7.58
	07/12/1999		5.80	7.54
	01/17/2000		NM	NM
	08/10/2000		6.12	7.22
	10/06/2000		6.13	7.21
	01/15/2001		NM	NM
	04/19/2001		NM	NM
	07/02/2001		NM	NM
	09/07/2001		NM	NM
	10/18/2001		NM	NM
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		NM	NM
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		NM	NM
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		NM	NM
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		NM	NM
	01/13/2003		NM	NM
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	07/07/2003		NM	NM
	01/15/2004		NM	NM
	04/21/2004		NM	NM
LF-24	04/24/1996	12.92	4.40	8.52
	07/29/1996		5.24	7.68
	12/13/1996		4.10	8.82
	04/15/1997		5.56	7.36
	09/19/1997		6.15	6.77
	12/03/1997		4.51	8.41
	12/15/1997		4.26	8.66
	01/13/1998		3.56	9.36
	01/30/1998		3.33	9.59
	02/24/1998		2.48	10.44

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-24	04/06/1998	12.92	4.01	8.91
	07/02/1998		5.34	7.58
	07/13/1998		5.42	7.50
	09/28/1998		5.74	7.18
	10/16/1998		5.67	7.25
	01/08/1999		5.11	7.81
	04/16/1999		4.41	8.51
	06/21/1999		5.96	6.96
	07/12/1999		5.96	6.96
	01/17/2000		NM	NM
	08/10/2000		6.53	6.39
	10/06/2000		6.52	6.40
	01/15/2001		NM	NM
	04/19/2001		NM	NM
	07/02/2001		NM	NM
	09/07/2001		NM	NM
	10/18/2001		NM	NM
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		NM	NM
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		NM	NM
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		NM	NM
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		NM	NM
	01/13/2003		NM	NM
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	07/07/2003		NM	NM
	01/15/2004		NM	NM
	04/21/2004		NM	NM
	10/19/2006		6.00	6.92
	01/18/2007		5.67	7.25
	04/12/2007		5.99	6.93
	07/19/2007		6.07	6.85
	10/12/2007		5.65	7.27
	01/17/2008		5.48	7.44
	04/10/2008		6.16	6.76
	07/24/2008		6.35	6.57
	10/22/2008		6.29	6.63
	01/08/2009		5.68	7.24

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-24	04/09/2009	12.92	5.68	7.24
	07/16/2009		6.18	6.74
	10/16/2009		NM	NM
	01/14/2010		NM	NM
	04/23/2010		NM	NM
	07/23/2010		NM	NM
	10/15/2010		6.18	2.69
	01/28/2011		NM	NM
	04/19/2011		NM	NM
	02/23/2012		6.18	6.74
	03/20/2012		NM	NM
	04/16/2012		5.81	7.11
	05/14/2012		6.30	6.62
	06/11/2012		6.37	6.55
	04/19/2013		6.29	6.63
	05/13/2014		6.34	6.58
LF-25	04/24/1996	14.01	7.15	6.86
	07/29/1996		7.66	6.35
	12/13/1996		6.85	7.16
	04/15/1997		8.02	5.99
	09/19/1997		7.86	6.15
	12/03/1997		7.07	6.94
	12/15/1997		6.99	7.02
	01/13/1998		6.43	7.58
	01/30/1998		6.52	7.49
	02/24/1998		5.91	8.10
	04/06/1998		7.09	6.92
	07/02/1998		7.92	6.09
	07/13/1998		7.90	6.11
	09/28/1998		7.73	6.28
	10/16/1998		8.56	5.45
	01/08/1999		7.31	6.70
	04/16/1999		6.51	7.50
	06/21/1999		7.80	6.21
	07/12/1999		7.74	6.27
	01/17/2000		NM	NM
	08/10/2000		8.55	5.46
	10/06/2000		8.75	5.26
	01/15/2001		NM	NM
	04/19/2001		NM	NM
	07/02/2001		NM	NM
	09/07/2001		NM	NM
	10/18/2001		NM	NM
	11/02/2001		NM	NM
	12/14/2001		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-25	01/18/2002	14.01	NM	NM
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		NM	NM
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		NM	NM
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		NM	NM
	01/13/2003		NM	NM
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	07/07/2003		NM	NM
	01/15/2004		NM	NM
	04/21/2004		NM	NM
	10/19/2006		7.67	6.34
	01/18/2007		7.35	6.66
	04/12/2007		7.59	6.42
	07/19/2007		7.84	6.17
	10/12/2007		7.25	6.76
	01/17/2008		7.09	6.92
	04/10/2008		7.93	6.08
	07/24/2008		8.38	5.63
	10/22/2008		8.24	5.77
	01/08/2009		7.34	6.67
	04/09/2009		7.48	6.53
	07/16/2009		8.06	5.95
	10/16/2009		NM	NM
	01/14/2010		NM	NM
	04/23/2010		NM	NM
	07/23/2010		NM	NM
	10/15/2010		8.06	2.69
	01/28/2011		NM	NM
	04/19/2011		NM	NM
	02/23/2012		7.97	6.04
	03/20/2012		NM	NM
	04/16/2012		7.64	6.37
	05/14/2012		8.17	5.84
	06/11/2012		8.35	5.66
	04/19/2013		8.24	5.77
	05/13/2014		8.29	5.72
LF-26	04/24/1996	15.60	7.90	7.70
	07/29/1996		8.08	7.52
	12/13/1996		6.75	8.85

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-26	04/15/1997	15.60	7.21	8.39
	09/19/1997		7.61	7.99
	12/03/1997		8.96	6.64
	12/15/1997		7.11	8.49
	01/13/1998		4.05	11.55
	01/30/1998		3.85	11.75
	02/24/1998		3.89	11.71
	04/06/1998		5.91	9.69
	07/02/1998		8.12	7.48
	07/13/1998		7.96	7.64
	09/28/1998		9.07	6.53
	10/16/1998		9.00	6.60
	01/08/1999		6.61	8.99
	04/16/1999		5.88	9.72
	06/21/1999		8.39	7.21
	07/12/1999		8.73	6.87
	10/08/1999		9.44	6.16
	01/17/2000		8.70	6.90
	04/25/2000		5.28	10.32
	05/30/2000		6.24	9.36
	06/26/2000		NM	NM
	08/10/2000		7.52	8.08
	10/06/2000		8.23	7.37
	01/15/2001		6.77	8.83
	04/19/2001		5.01	10.59
	07/02/2001		7.03	8.57
	09/07/2001		NM	NM
	10/18/2001		8.29	7.31
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		5.10	10.50
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		5.95	9.65
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		7.27	8.33
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		7.91	7.69
	01/13/2003		5.81	9.79
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		6.70	8.90
	07/07/2003		8.36	7.24

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-26	10/27/2003	15.60	NM	NM
	11/18/2003		7.85	7.75
	01/15/2004		6.51	9.09
	04/21/2004		7.43	8.17
	07/13/2004		8.51	7.09
	10/12/2004		8.33	7.27
	01/24/2005		7.70	7.90
	04/25/2005		7.04	8.56
	07/20/2005		8.06	7.54
	10/21/2005		8.89	6.71
	01/20/2006		4.40	11.20
	04/27/2006		6.17	9.43
	07/20/2006		8.20	7.40
	10/19/2006		8.65	6.95
	01/18/2007		6.71	8.89
	04/12/2007		7.23	8.37
	07/19/2007		8.89	6.71
	08/17/2007		8.95	6.65
	08/24/2007		8.91	6.69
	08/30/2007		8.62	6.98
	09/06/2007		8.57	7.03
	09/14/2007		8.54	7.06
	09/21/2007		8.51	7.09
	09/28/2007		8.36	7.24
	10/05/2007		8.20	7.40
	10/12/2007		7.22	8.38
	10/19/2007		7.00	8.60
	10/26/2007		6.89	8.71
	11/02/2007		6.79	8.81
	11/09/2007		6.70	8.90
	11/15/2007		5.92	9.68
	11/21/2007		6.08	9.52
	11/29/2007		6.10	9.50
	01/17/2008		5.98	9.62
	04/10/2008		7.59	8.01
	07/24/2008		9.05	6.55
	10/22/2008		9.06	6.54
	01/08/2009		7.30	8.30
	04/09/2009		6.54	9.06
	07/16/2009		8.22	7.38
	10/16/2009		6.69	8.89
	01/14/2010		7.92	7.68
	04/23/2010		6.40	9.20
	07/23/2010		8.18	7.42
	10/15/2010		8.75	6.84

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-26	01/28/2011	15.60	7.28	8.32
	04/19/2011		7.86	7.74
LF-27	12/29/1997	17.83	7.07	10.76
	01/30/1998		6.25	11.58
	02/24/1998		5.92	11.91
	04/06/1998		6.67	11.16
	07/02/1998		7.08	10.75
	07/13/1998		7.38	10.45
	09/28/1998		7.53	10.30
	10/16/1998		7.70	10.13
	01/08/1999		7.47	10.36
	04/16/1999		6.83	11.00
	06/21/1999		7.60	10.23
	07/12/1999		7.71	10.12
	10/08/1999		7.71	10.12
	01/17/2000		7.36	10.47
	04/25/2000		7.03	10.80
	05/30/2000		7.28	10.55
	06/26/2000		NM	NM
	08/10/2000		7.69	10.14
	08/31/2000		7.57	10.26
	09/25/2000		7.65	10.18
	10/06/2000		7.66	10.17
	11/21/2000		7.44	10.39
	12/18/2000		7.16	10.67
	01/15/2001		7.00	10.83
	02/14/2001		6.56	11.27
	03/01/2001		6.45	11.38
	04/19/2001		7.20	10.63
	05/23/2001		7.52	10.31
	06/14/2001		7.45	10.38
	07/02/2001		7.46	10.37
	08/10/2001		7.33	10.50
	09/07/2001		7.33	10.50
	10/18/2001		7.38	10.45
	11/02/2001		7.34	10.49
	12/14/2001		5.31	12.52
	01/18/2002		6.65	11.18
	02/21/2002		6.63	11.20
	03/25/2002		6.73	11.10
	04/18/2002		7.08	10.75
	05/10/2002		7.25	10.58
	06/04/2002		7.10	10.73
	07/10/2002		7.26	10.57
	08/15/2002		7.33	10.50

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-27	09/11/2002	17.83	7.21	10.62
	10/08/2002		7.21	10.62
	11/07/2002		7.18	10.65
	12/12/2002		7.04	10.79
	01/13/2003		6.26	11.57
	02/26/2003		6.62	11.21
	03/19/2003		6.59	11.24
	04/14/2003		6.50	11.33
	05/13/2003		6.36	11.47
	06/13/2003		7.60	10.23
	07/07/2003		7.11	10.72
	08/13/2003		7.20	10.63
	09/17/2003		7.20	10.63
	10/27/2003		7.27	10.56
	11/18/2003		7.11	10.72
	12/19/2003		6.67	11.16
	01/15/2004		5.57	12.26
	02/17/2004		6.28	11.55
	03/18/2004		6.82	11.01
	04/21/2004		6.99	10.84
	05/18/2004		6.60	11.23
	06/10/2004		7.04	10.79
	07/13/2004		7.19	10.64
	08/12/2004		7.25	10.58
	09/16/2004		7.39	10.44
	10/12/2004		7.28	10.55
	11/17/2004		6.83	11.00
	12/15/2004		6.63	11.20
	01/24/2005		6.65	11.18
	02/15/2005		6.67	11.16
	03/15/2005		6.67	11.16
	04/25/2005		6.68	11.15
	05/20/2005		6.82	11.01
	06/21/2005		7.01	10.82
	07/20/2005		7.25	10.58
	08/19/2005		7.38	10.45
	09/16/2005		7.40	10.43
	10/21/2005		7.56	10.27
	11/18/2005		7.22	10.61
	12/16/2005		7.08	10.75
	01/20/2006		6.07	11.76
	02/22/2006		6.53	11.30
	03/30/2006		5.79	12.04
	04/27/2006		6.38	11.45
	05/18/2006		6.72	11.11

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-27	06/22/2006	17.83	6.91	10.92
	07/20/2006		6.96	10.87
	08/17/2006		7.00	10.83
	09/14/2006		7.04	10.79
	10/19/2006		6.99	10.84
	11/21/2006		6.89	10.94
	12/21/2006		6.46	11.37
	01/18/2007		6.87	10.96
	02/06/2007		7.04	10.79
	03/08/2007		6.55	11.28
	04/12/2007		6.84	10.99
	05/10/2007		6.71	11.12
	06/07/2007		7.05	10.78
	07/19/2007		7.08	10.75
	08/09/2007		7.12	10.71
	09/14/2007		6.86	10.97
	10/12/2007		6.76	11.07
	11/09/2007		6.92	10.91
	12/14/2007		6.68	11.15
	01/17/2008		6.42	11.41
	02/21/2008		6.30	11.53
	03/20/2008		6.87	10.96
	04/10/2008		7.10	10.73
	05/08/2008		7.13	10.70
	06/12/2008		7.15	10.68
	07/24/2008		7.32	10.51
	08/14/2008		7.31	10.52
	09/18/2008		7.26	10.57
	10/22/2008		7.34	10.49
	11/13/2008		6.80	11.03
	12/04/2008		6.95	10.88
	01/08/2009		6.63	11.20
	02/11/2009		6.48	11.35
	03/12/2009		6.05	11.78
	04/09/2009		6.51	11.32
	05/20/2009		6.70	11.13
	06/17/2009		6.89	10.94
	07/16/2009		6.98	10.85
	08/13/2009		6.94	10.89
	09/10/2009		7.08	10.75
	10/16/2009		6.34	11.47
	11/12/2009		6.71	11.12
	12/03/2009		6.86	10.97
	01/14/2010		6.60	11.23
	02/18/2010		6.26	11.57

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-27	03/25/2010	17.83	6.40	11.43
	04/23/2010		6.31	11.52
	05/21/2010		6.63	11.20
	06/10/2010		6.78	11.05
	07/23/2010		6.88	10.95
	08/12/2010		6.98	10.85
	09/10/2010		7.05	10.78
	10/15/2010		7.16	10.66
	11/04/2010		6.81	11.02
	12/03/2010		6.61	11.22
	01/28/2011		6.61	11.22
	02/10/2011		6.73	11.10
	03/31/2011		5.80	12.03
	04/19/2011		6.51	11.32
	10/05/2011		10.34	7.49
	10/12/2011		NM	NM
	10/19/2011		9.96	7.87
	10/26/2011		NM	NM
	11/02/2011		10.98	6.85
	11/09/2011		NM	NM
	11/16/2011		8.91	8.92
	11/23/2011		NM	NM
	11/30/2011		8.54	9.29
	12/06/2011		NM	NM
	01/27/2012		7.39	10.44
	02/23/2012		7.23	10.60
	03/20/2012		6.41	11.42
	04/16/2012		6.15	11.68
	05/14/2012		6.88	10.95
	06/14/2012		7.11	10.72
	07/18/2012		7.14	10.69
	08/15/2012		7.19	10.64
	09/13/2012		7.22	10.61
	10/17/2012		7.24	10.59
	11/16/2012		6.83	11.00
	12/14/2012		6.31	11.52
	01/18/2013		6.56	11.27
	02/22/2013		6.72	11.11
	03/21/2013		6.56	11.27
	04/19/2013		6.52	11.31
	07/16/2013		7.24	10.59
	10/07/2013		7.59	10.24
	01/03/2014		7.52	10.31
	04/22/2014		6.96	10.87
	07/08/2014		7.44	10.39

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-27	10/28/2014	17.83	7.51	10.32
LF-28	12/29/1997	17.09	7.52	9.57
	01/30/1998		6.17	10.92
	02/24/1998		5.51	11.58
	04/06/1998		6.62	10.47
	07/02/1998		7.37	9.72
	07/13/1998		7.17	9.92
	09/28/1998		7.72	9.37
	10/16/1998		7.81	9.28
	01/08/1999		7.18	9.91
	04/16/1999		6.62	10.47
	06/21/1999		7.73	9.36
	07/12/1999		7.90	9.19
	10/08/1999		8.03	9.06
	01/17/2000		7.77	9.32
	04/25/2000		6.83	10.26
	05/30/2000		7.57	9.52
	06/26/2000		NM	NM
	08/10/2000		8.02	9.07
	08/31/2000		7.51	9.58
	09/25/2000		7.70	9.39
	10/06/2000		7.76	9.33
	11/21/2000		7.81	9.28
	12/18/2000		7.60	9.49
	01/15/2001		7.51	9.58
	02/14/2001		7.02	10.07
	03/01/2001		6.90	10.19
	04/19/2001		7.29	9.80
	05/23/2001		7.60	9.49
	06/14/2001		7.73	9.36
	07/02/2001		7.78	9.31
	08/10/2001		7.48	9.61
	09/07/2001		7.56	9.53
	10/18/2001		7.72	9.37
	11/02/2001		NM	NM
	12/14/2001		6.26	10.83
	01/18/2002		6.46	10.63
	02/21/2002		6.83	10.26
	03/25/2002		6.82	10.27
	04/18/2002		7.22	9.87
	05/10/2002		7.47	9.62
	06/04/2002		7.46	9.63
	07/10/2002		7.57	9.52
	08/15/2002		7.51	9.58
	09/11/2002		7.29	9.80

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-28	10/08/2002	17.09	7.43	9.66
	11/07/2002		7.55	9.54
	12/12/2002		7.45	9.64
	01/13/2003		5.73	11.36
	02/26/2003		6.86	10.23
	03/19/2003		6.64	10.45
	04/14/2003		7.29	9.80
	05/13/2003		6.61	10.48
	06/13/2003		7.01	10.08
	07/07/2003		7.12	9.97
	08/13/2003		7.24	9.85
	09/17/2003		7.27	9.82
	10/27/2003		7.45	9.64
	12/19/2003		6.73	10.36
	01/15/2004		6.30	10.79
	02/17/2004		6.79	10.30
	03/18/2004		6.65	10.44
	04/21/2004		7.03	10.06
	05/18/2004		7.25	9.84
	06/10/2004		7.15	9.94
	07/13/2004		7.21	9.88
	08/12/2004		7.24	9.85
	09/16/2004		7.45	9.64
	10/12/2004		7.49	9.60
	11/17/2004		7.13	9.96
	12/15/2004		6.78	10.31
	01/24/2005		6.41	10.68
	02/15/2005		6.71	10.38
	03/15/2005		6.39	10.70
	04/25/2005		6.62	10.47
	05/20/2005		6.62	10.47
	06/21/2005		6.73	10.36
	07/20/2005		7.28	9.81
	08/19/2005		7.49	9.60
	09/16/2005		7.52	9.57
	10/21/2005		7.69	9.40
	11/18/2005		7.49	10.34
	12/16/2005		7.33	9.76
	01/23/2006		6.08	11.01
	02/22/2006		5.28	11.81
	03/30/2006		5.11	11.98
	04/27/2006		5.71	11.38
	05/18/2006		6.21	10.88
	06/22/2006		6.60	10.49
	07/20/2006		6.50	10.59

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-28	08/17/2006	17.09	6.33	10.76
	09/14/2006		6.54	10.55
	10/19/2006		6.53	10.56
	11/21/2006		6.68	10.41
	12/21/2006		6.06	11.03
	01/18/2007		6.59	10.50
	02/06/2007		6.74	10.35
	03/08/2007		6.19	10.90
	04/12/2007		6.55	10.54
	05/10/2007		6.74	10.35
	06/07/2007		6.80	10.29
	07/19/2007		6.76	10.33
	08/09/2007		6.74	10.35
	09/14/2007		6.71	10.38
	10/12/2007		6.57	10.52
	11/09/2007		6.57	10.52
	12/14/2007		6.36	10.73
	01/17/2008		5.99	11.10
	02/21/2008		5.93	11.16
	03/20/2008		5.59	11.50
	04/10/2008		6.78	10.31
	05/08/2008		6.98	10.11
	06/12/2008		6.81	10.28
	07/24/2008		7.05	10.04
	08/14/2008		6.96	10.13
	09/18/2008		6.87	10.22
	10/22/2008		7.06	10.03
	11/13/2008		6.78	10.31
	12/04/2008		6.77	10.32
	01/08/2009		6.51	10.58
	02/11/2009		6.27	10.82
	03/12/2009		5.29	11.80
	04/09/2009		6.00	11.09
	05/20/2009		6.18	10.91
	06/17/2009		6.40	10.69
	07/16/2009		6.41	10.68
	08/13/2009		6.30	10.79
	09/10/2009		6.59	10.50
	10/16/2009		5.78	11.29
	11/12/2009		6.27	10.82
	12/03/2009		6.41	10.68
	01/14/2010		6.27	10.82
	02/18/2010		5.59	11.50
	03/25/2010		5.74	11.35
	04/23/2010		5.68	11.41

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-28	05/21/2010	17.09	6.13	10.96
	06/10/2010		6.34	10.75
	07/23/2010		6.28	10.81
	08/12/2010		6.45	10.64
	09/10/2010		6.50	10.59
	10/15/2010		6.76	10.32
	11/04/2010		6.56	10.53
	12/03/2010		6.22	10.87
	01/28/2011		6.01	11.08
	02/10/2011		6.20	10.89
	03/31/2011		4.88	12.21
	04/19/2011		5.83	11.26
	10/05/2011		NM	NM
	10/12/2011		9.89	7.20
	10/19/2011		10.18	6.91
	10/26/2011		NM	NM
	11/02/2011		10.32	6.77
	11/09/2011		NM	NM
	11/16/2011		9.62	7.47
	11/23/2011		NM	NM
	11/30/2011		9.21	7.88
	12/06/2011		NM	NM
	01/27/2012		7.90	9.19
	02/23/2012		7.58	9.51
	03/20/2012		6.82	10.27
	04/16/2012		5.07	12.02
	05/14/2012		6.24	10.85
	06/11/2012		6.64	10.45
	07/18/2012		6.68	10.41
	08/15/2012		6.69	10.40
	09/13/2012		6.67	10.42
	10/17/2012		6.84	10.25
	11/16/2012		6.58	10.51
	12/14/2012		5.55	11.54
	01/18/2013		6.08	11.01
	02/22/2013		6.50	10.59
	03/21/2013		6.46	10.63
	04/19/2013		6.19	10.90
	07/16/2013		6.84	10.25
	10/07/2013		7.38	9.71
	01/03/2014		7.03	10.06
	04/22/2014		6.62	10.47
	07/08/2014		7.30	9.79
	10/28/2014		7.47	9.62
LF-29	12/29/1997	16.40	6.79	9.61

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-29	01/30/1998	16.40	5.57	10.83
	02/24/1998		4.95	11.45
	04/06/1998		6.61	9.79
	07/02/1998		6.95	9.45
	07/13/1998		7.01	9.39
	09/28/1998		7.22	9.18
	10/16/1998		7.35	9.05
	01/08/1999		7.10	9.30
	04/16/1999		6.14	10.26
	06/21/1999		7.26	9.14
	07/12/1999		7.44	8.96
	10/08/1999		7.53	8.87
	01/17/2000		7.47	8.93
	04/25/2000		6.84	9.56
	05/30/2000		7.08	9.32
	06/26/2000		NM	NM
	08/10/2000		7.54	8.86
	08/31/2000		6.80	9.60
	09/25/2000		7.08	9.32
	10/06/2000		7.21	9.19
	11/21/2000		7.35	9.05
	12/18/2000		7.14	9.26
	01/15/2001		6.93	9.47
	02/14/2001		6.51	9.89
	03/01/2001		5.81	10.59
	04/19/2001		6.91	9.49
	05/23/2001		7.12	9.28
	06/14/2001		7.40	9.00
	07/02/2001		7.43	8.97
	08/10/2001		7.05	9.35
	09/07/2001		7.02	9.38
	10/18/2001		7.24	9.16
	11/02/2001		7.20	9.20
	12/14/2001		5.87	10.53
	01/18/2002		6.02	10.38
	02/21/2002		6.16	10.24
	03/25/2002		6.38	10.02
	04/18/2002		6.73	9.67
	05/10/2002		7.03	9.37
	06/04/2002		6.81	9.59
	07/10/2002		7.11	9.29
	08/15/2002		6.92	9.48
	09/11/2002		6.46	9.94
	10/08/2002		6.94	9.46
	11/07/2002		6.97	9.43

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-29	12/12/2002	16.40	6.75	9.65
	01/13/2003		5.39	11.01
	02/26/2003		5.51	10.89
	03/19/2003		6.24	10.16
	04/14/2003		5.90	10.50
	05/13/2003		6.30	10.10
	06/13/2003		6.51	9.89
	07/07/2003		6.80	9.60
	08/13/2003		6.62	9.78
	09/17/2003		6.67	9.73
	10/27/2003		6.91	9.49
	11/18/2003		6.71	9.69
	12/19/2003		6.15	10.25
	01/15/2004		6.02	10.38
	02/17/2004		5.70	10.70
	03/18/2004		6.35	10.05
	04/21/2004		6.64	9.76
	05/18/2004		6.75	9.65
	06/10/2004		6.95	9.45
	07/13/2004		6.68	9.72
	08/12/2004		6.70	9.70
	09/16/2004		6.93	9.47
	10/12/2004		6.89	9.51
	11/17/2004		6.49	9.91
	12/15/2004		6.10	10.30
	01/24/2005		5.94	10.46
	02/15/2005		6.07	10.33
	03/15/2005		5.97	10.43
	04/25/2005		5.76	10.64
	05/20/2005		6.05	10.35
	06/21/2005		6.39	10.01
	07/20/2005		6.17	10.23
	08/19/2005		6.23	10.17
	09/16/2005		6.99	9.41
	10/21/2005		7.20	9.20
	11/18/2005		7.02	9.38
	12/16/2005		6.66	9.74
	01/20/2006		5.66	10.74
	02/22/2006		5.41	10.99
	03/30/2006		4.60	11.80
	04/27/2006		5.30	11.10
	05/18/2006		5.85	10.55
	06/22/2006		6.16	10.24
	07/20/2006		6.08	10.32
	08/17/2006		5.97	10.43

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-29	09/14/2006	16.40	6.11	10.29
	10/19/2006		6.11	10.29
	11/21/2006		6.29	10.11
	12/21/2006		5.72	10.68
	01/18/2007		6.22	10.18
	02/06/2007		6.42	9.98
	03/08/2007		5.73	10.67
	04/12/2007		6.24	10.16
	05/10/2007		6.05	10.35
	06/07/2007		6.34	10.06
	07/19/2007		6.28	10.12
	08/09/2007		6.44	9.96
	09/14/2007		6.50	9.90
	10/12/2007		5.88	10.52
	11/09/2007		6.15	10.25
	12/14/2007		5.95	10.45
	01/17/2008		5.55	10.85
	02/21/2008		8.45	7.95
	03/20/2008		6.15	10.25
	04/10/2008		6.44	9.96
	05/08/2008		6.49	9.91
	06/12/2008		6.25	10.15
	07/24/2008		6.55	9.85
	08/14/2008		6.46	9.94
	09/18/2008		6.37	10.03
	10/22/2008		6.66	9.74
	11/13/2008		6.24	10.16
	12/04/2008		6.37	10.03
	01/08/2009		5.98	10.42
	02/11/2009		5.87	10.53
	03/12/2009		4.89	11.51
	04/09/2009		5.54	10.86
	05/20/2009		5.71	10.69
	06/17/2009		5.95	10.45
	07/16/2009		5.88	10.52
	08/13/2009		5.79	10.61
	09/10/2009		6.13	10.27
	10/16/2009		5.28	11.10
	11/12/2009		5.76	10.64
	12/03/2009		5.98	10.42
	01/14/2010		5.88	10.52
	02/18/2010		5.11	11.29
	03/25/2010		5.30	11.10
	04/23/2010		5.27	11.13
	05/21/2010		5.66	10.74

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-29	06/10/2010	16.40	5.86	10.54
	07/23/2010		5.77	10.63
	08/12/2010		5.98	10.42
	09/10/2010		6.01	10.39
	10/15/2010		6.26	10.13
	11/04/2010		6.03	10.37
	12/03/2010		5.75	10.65
	01/28/2011		5.58	10.82
	02/10/2011		5.72	10.68
	03/31/2011		4.44	11.96
	04/19/2011		5.38	11.02
	03/20/2012		5.97	10.43
	04/16/2012		NM	NM
	05/14/2012		6.00	10.40
	06/11/2012		6.30	10.10
	07/18/2012		6.33	10.07
	08/15/2012		6.19	10.21
	09/13/2012		6.12	10.28
	10/17/2012		6.46	9.94
	11/16/2012		6.10	10.30
	12/14/2012		5.16	11.24
	01/18/2013		5.70	10.70
	02/22/2013		6.08	10.32
	03/21/2013		6.05	10.35
	04/19/2013		5.69	10.71
	07/16/2013		6.43	9.97
	10/07/2013		6.87	9.53
	01/03/2014		6.52	9.88
	04/22/2014		NM	NM
	07/08/2014		6.83	9.57
	10/28/2014		6.95	9.45
LF-3	06/14/1989	14.70	4.95	9.73
	01/10/1990 (a)		4.60	10.08
	01/18/1990 (b)		3.87	10.81
	01/18/1990 (c)		3.92	10.76
	01/30/1991		5.11	9.57
	06/19/1991		5.10	9.58
	12/16/1991		5.19	9.49
	07/10/1992		5.09	9.59
	12/30/1992		4.08	10.60
	06/08/1993		4.79	9.89
	01/05/1994		5.09	9.59
	09/08/1994		5.70	8.98
	03/29/1995		NM	NM
	04/24/1996		4.87	9.83

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-3	07/29/1996	14.70	5.57	9.13
	12/13/1996		4.89	9.81
	04/15/1997		5.78	8.92
	09/19/1997		5.71	8.99
	12/03/1997		5.18	9.52
	12/15/1997		4.61	10.09
	01/13/1998		3.62	11.08
	01/30/1998		4.18	10.52
	02/24/1998		3.65	11.05
	04/06/1998		5.05	9.65
	07/02/1998		5.85	8.85
	07/13/1998		5.89	8.81
	09/28/1998		6.06	8.64
	10/16/1998		6.07	8.63
	01/08/1999		5.63	9.07
	04/16/1999		4.41	10.29
	06/21/1999		6.03	8.67
	07/12/1999		6.06	8.64
	10/08/1999		5.91	8.79
	01/17/2000		5.67	9.03
	04/25/2000		4.95	9.75
	05/30/2000		5.48	9.22
	06/26/2000		NM	NM
	08/10/2000		6.00	8.70
	10/06/2000		5.85	8.85
	01/15/2001		4.34	10.36
	04/19/2001		5.21	9.49
	07/02/2001		5.65	9.05
	09/07/2001		NM	NM
	10/18/2001		5.50	9.20
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		4.73	9.97
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		5.37	9.33
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		5.54	9.16
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		5.59	9.11
	01/13/2003		4.02	10.68
	02/26/2003		NM	NM
	03/19/2003		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-3	04/14/2003	14.70	4.08	10.62
	07/07/2003		5.53	9.17
	10/27/2003		NM	NM
	11/18/2003		5.19	9.51
	01/15/2004		4.60	10.10
	04/21/2004		5.20	9.50
	07/13/2004		5.60	9.10
	10/12/2004		5.57	9.13
	01/24/2005		4.65	10.05
	04/25/2005		5.00	9.70
	07/20/2005		5.44	9.26
	10/21/2005		5.68	9.02
	01/20/2006		3.60	11.10
	04/27/2006		4.62	10.08
	07/20/2006		5.40	9.30
	10/19/2006		5.41	9.29
	01/18/2007		5.02	9.68
	04/12/2007		5.18	9.52
	07/19/2007		5.45	9.25
	08/17/2007		5.48	9.22
	08/24/2007		5.54	9.16
	08/30/2007		5.55	9.15
	09/06/2007		5.54	9.16
	09/14/2007		5.44	9.26
	09/21/2007		5.32	9.38
	09/28/2007		5.30	9.40
	10/05/2007		5.36	9.34
	10/12/2007		4.20	10.50
	10/19/2007		4.21	10.49
	10/26/2007		4.67	10.03
	11/02/2007		4.91	9.79
	11/09/2007		5.08	9.62
	11/15/2007		4.21	10.49
	11/21/2007		4.71	9.99
	11/29/2007		5.01	9.69
	01/17/2008		4.16	10.54
	04/10/2008		5.35	9.35
	07/24/2008		5.96	8.74
	10/22/2008		5.56	9.14
	01/08/2009		4.44	10.26
	04/09/2009		4.70	10.00
	07/16/2009		5.45	9.25
	10/16/2009		3.40	11.28
	01/14/2010		4.58	10.12
	04/23/2010		3.88	10.82

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-3	07/23/2010	14.70	5.39	9.31
	10/15/2010		5.55	9.14
	01/28/2011		4.71	9.99
	04/19/2011		4.54	10.16
LF-30	12/29/1997	15.86	10.43	5.43
	01/30/1998		9.24	6.62
	02/24/1998		9.05	6.81
	04/06/1998		6.14	9.72
	07/02/1998		10.29	5.57
	07/13/1998		10.21	5.65
	09/28/1998		10.23	5.63
	10/16/1998		10.21	5.65
	01/08/1999		10.66	5.20
	04/16/1999		10.25	5.61
	06/21/1999		10.81	5.05
	07/12/1999		10.58	5.28
	10/08/1999		11.08	4.78
	01/17/2000		10.77	5.09
	04/25/2000		10.72	5.14
	05/30/2000		11.00	4.86
	06/26/2000		NM	NM
	08/10/2000		10.94	4.92
	10/06/2000		10.85	5.01
	01/15/2001		10.38	5.48
	04/19/2001		10.81	5.05
	07/02/2001		11.75	4.11
	09/07/2001		NM	NM
	10/18/2001		11.02	4.84
	11/02/2001		NM	NM
	12/14/2001		10.08	5.78
	01/18/2002		10.55	5.31
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		10.88	4.98
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		10.87	4.99
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		10.25	5.61
	01/13/2003		10.37	5.49
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		10.59	5.27
	07/07/2003		11.31	4.55

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-30	10/27/2003	15.86	NM	NM
	11/18/2003		11.01	4.85
	01/15/2004		10.20	5.66
	04/21/2004		10.75	5.11
	07/13/2004		10.12	5.74
	10/12/2004		10.58	5.28
	01/24/2005		10.31	5.55
	04/25/2005		10.40	5.46
	06/21/2005		10.60	5.26
	07/20/2005		10.26	5.60
	10/21/2005		10.93	4.93
	01/20/2006		10.12	5.74
	04/27/2006		10.05	5.81
	07/20/2006		10.29	5.57
	10/19/2006		9.82	6.04
	01/18/2007		10.94	4.92
	04/12/2007		10.49	5.37
	07/19/2007		10.60	5.26
	10/12/2007		10.50	5.36
	01/17/2008		10.21	5.65
	04/10/2008		10.97	4.89
	07/24/2008		10.48	5.38
	10/22/2008		10.79	5.07
	01/08/2009		10.77	5.09
	04/09/2009		10.57	5.29
	07/16/2009		10.35	5.51
	10/16/2009		9.35	6.49
	01/14/2010		10.50	5.36
	04/23/2010		10.02	5.84
	07/23/2010		10.33	5.53
	10/15/2010		10.60	5.25
	01/28/2011		10.50	5.36
	04/19/2011		10.38	5.48
	03/20/2012		9.44	6.42
LF-31	06/21/1999	18.40	9.06	9.34
	07/12/1999		9.26	9.14
	10/08/1999		9.40	9.00
LF-32	06/21/1999	18.73	9.42	9.31
	07/12/1999		9.62	9.11
	10/08/1999		9.78	8.95
LF-33	06/21/1999	18.55	9.28	9.27
	07/12/1999		9.51	9.04
	10/08/1999		9.67	8.88
LF-34	06/21/1999	18.96	9.74	9.22

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-34	07/12/1999	18.96	9.91	9.05
	10/08/1999		10.08	8.88
LF-35	10/08/1999	18.93	10.05	8.88
	02/11/2000		9.62	9.31
	04/25/2000		9.07	9.86
	05/30/2000		9.45	9.48
	06/26/2000		NM	NM
	08/10/2000		10.01	8.92
	08/31/2000		9.65	9.28
	09/25/2000		9.71	9.22
	10/06/2000		9.85	9.08
	11/21/2000		9.66	9.27
	12/18/2000		9.52	9.41
	01/15/2001		9.38	9.55
	02/14/2001		8.81	10.12
	03/01/2001		8.25	10.68
	04/19/2001		9.31	9.62
	05/23/2001		9.76	9.17
	06/14/2001		9.75	9.18
	07/02/2001		9.79	9.14
	08/10/2001		9.56	9.37
	09/07/2001		9.28	9.65
	10/18/2001		9.84	9.09
	11/02/2001		9.70	9.23
	12/14/2001		8.75	10.18
	01/18/2002		8.58	10.35
	02/21/2002		8.71	10.22
	03/25/2002		8.86	10.07
	04/18/2002		9.31	9.62
	05/10/2002		9.55	9.38
	06/04/2002		9.31	9.62
	07/10/2002		9.55	9.38
	08/15/2002		9.62	9.31
	09/11/2002		9.31	9.62
	10/08/2002		9.39	9.54
	11/07/2002		9.44	9.49
	12/12/2002		9.40	9.53
	01/13/2003		7.85	11.08
	02/26/2003		6.85	12.08
	03/19/2003		8.63	10.30
	04/14/2003		8.78	10.15
	05/13/2003		8.94	9.99
	06/13/2003		9.11	9.82
	07/07/2003		8.21	10.72
	08/13/2003		9.27	9.66

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-35	09/17/2003	18.93	9.31	9.62
	10/27/2003		9.40	9.53
	11/18/2003		9.30	9.63
	12/19/2003		8.67	10.26
	01/15/2004		8.80	10.13
	02/17/2004		8.51	10.42
	03/18/2004		8.89	10.04
	04/21/2004		9.15	9.78
	05/18/2004		9.45	9.48
	06/10/2004		9.32	9.61
	07/13/2004		9.35	9.58
	08/12/2004		9.30	9.63
	09/16/2004		9.46	9.47
	10/12/2004		9.35	9.58
	11/17/2004		9.00	9.93
	12/15/2004		8.72	10.21
	01/24/2005		8.51	10.42
	02/15/2005		8.89	10.04
	03/15/2005		8.81	10.12
	04/25/2005		8.59	10.34
	05/20/2005		8.70	10.23
	06/21/2005		8.93	10.00
	07/20/2005		9.43	9.50
	08/19/2005		9.54	9.39
	09/16/2005		9.56	9.37
	10/21/2005		9.69	9.24
	01/20/2006		8.50	10.43
	02/22/2006		8.35	10.58
	03/30/2006		7.80	11.13
	04/27/2006		8.95	9.98
	05/18/2006		8.35	10.58
	06/22/2006		8.65	10.28
	07/20/2006		8.68	10.25
	08/17/2006		8.73	10.20
	09/14/2006		8.78	10.15
	10/19/2006		8.70	10.23
	11/21/2006		8.74	10.19
	12/21/2006		8.24	10.69
	01/18/2007		8.48	10.45
	02/06/2007		8.79	10.14
	03/08/2007		8.20	10.73
	04/12/2007		8.62	10.31
	05/10/2007		8.60	10.33
	06/07/2007		8.85	10.08
	07/19/2007		8.91	10.02

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-35	08/09/2007	18.93	8.92	10.01
	09/14/2007		8.82	10.11
	10/12/2007		8.52	10.41
	11/09/2007		8.48	10.45
	12/14/2007		8.46	10.47
	01/17/2008		8.20	10.73
	02/21/2008		7.95	10.98
	03/20/2008		8.70	10.23
	04/10/2008		9.12	9.81
	05/08/2008		9.18	9.75
	06/12/2008		9.01	9.92
	07/24/2008		9.13	9.80
	08/14/2008		9.14	9.79
	09/18/2008		8.94	9.99
	10/22/2008		9.21	9.72
	11/13/2008		8.77	10.16
	12/04/2008		8.80	10.13
	01/08/2009		8.50	10.43
	02/11/2009		8.45	10.48
	03/12/2009		7.35	11.58
	04/09/2009		8.16	10.77
	05/20/2009		8.32	10.61
	06/17/2009		8.51	10.42
	07/16/2009		8.63	10.30
	08/13/2009		8.52	10.41
	09/10/2009		8.70	10.23
	10/16/2009		7.95	10.96
	11/12/2009		8.34	10.59
	12/03/2009		8.50	10.43
	01/14/2010		8.48	10.45
	02/18/2010		7.66	11.27
	03/25/2010		7.89	11.04
	04/23/2010		7.76	11.17
	05/21/2010		8.31	10.62
	06/10/2010		8.53	10.40
	07/23/2010		8.47	10.46
	08/12/2010		8.60	10.33
	09/10/2010		8.71	10.22
	10/15/2010		8.94	9.98
	11/04/2010		8.60	10.33
	12/03/2010		8.40	10.53
	01/28/2011		8.15	10.78
	02/10/2011		8.29	10.64
	03/31/2011		6.89	12.04
	04/19/2011		7.94	10.99

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-35	03/20/2012	18.93	8.48	10.45
	04/16/2012		7.51	11.42
	05/14/2012		8.39	10.54
	06/11/2012		8.68	10.25
	07/18/2012		8.75	10.18
	08/15/2012		8.76	10.17
	09/13/2012		8.74	10.19
	10/17/2012		8.87	10.06
	11/16/2012		8.50	10.43
	12/14/2012		7.67	11.26
	01/18/2013		8.18	10.75
	02/22/2013		8.57	10.36
	03/21/2013		8.51	10.42
	04/19/2013		8.29	10.64
	07/16/2013		8.94	9.99
	10/07/2013		9.31	9.62
	01/03/2014		9.21	9.72
	04/22/2014		8.70	10.23
	07/08/2014		9.07	9.86
	10/28/2014		9.41	9.52
LF-36	01/17/2000	18.87	9.76	9.11
	04/25/2000		9.15	9.72
	05/30/2000		9.47	9.40
	06/26/2000		9.73	9.14
	08/10/2000		9.97	8.90
	08/31/2000		9.41	9.46
	09/25/2000		9.63	9.24
	10/06/2000		9.67	9.20
	11/21/2000		9.76	9.11
	12/18/2000		9.51	9.36
	01/15/2001		9.35	9.52
	02/14/2001		8.81	10.06
	03/01/2001		8.24	10.63
	04/19/2001		9.21	9.66
	05/23/2001		9.50	9.37
	06/14/2001		9.65	9.22
	07/02/2001		9.67	9.20
	08/10/2001		9.41	9.46
	09/07/2001		9.52	9.35
	10/18/2001		9.69	9.18
	11/02/2001		9.70	9.17
	12/14/2001		8.20	10.67
	01/18/2002		8.35	10.52
	02/21/2002		8.65	10.22
	03/25/2002		7.71	11.16

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-36	04/18/2002	18.87	9.19	9.68
	05/10/2002		NM	NM
	06/04/2002		8.19	10.68
	07/10/2002		9.50	9.37
	08/15/2002		9.43	9.44
	09/11/2002		9.31	9.56
	10/08/2002		9.35	9.52
	11/07/2002		NM	NM
	12/12/2002		9.25	9.62
	01/13/2003		7.75	11.12
	02/26/2003		7.78	11.09
	03/19/2003		NM	NM
	04/14/2003		8.35	10.52
	05/13/2003		8.64	10.23
	06/13/2003		8.84	10.03
	07/07/2003		8.98	9.89
	08/13/2003		9.11	9.76
	09/17/2003		9.18	9.69
	10/27/2003		9.38	9.49
	11/18/2003		9.21	9.66
	12/19/2003		8.54	10.33
	01/15/2004		8.32	10.55
	02/17/2004		8.25	10.62
	03/18/2004		8.70	10.17
	04/21/2004		9.12	9.75
	05/18/2004		9.20	9.67
	06/10/2004		9.10	9.77
	07/13/2004		9.14	9.73
	08/12/2004		9.18	9.69
	09/16/2004		9.35	9.52
	10/12/2004		9.29	9.58
	11/17/2004		8.89	9.98
	12/15/2004		8.49	10.38
	01/24/2005		8.34	10.53
	02/15/2005		8.67	10.20
	03/15/2005		8.38	10.49
	04/25/2005		8.37	10.50
	05/20/2005		8.55	10.32
	06/21/2005		8.87	10.00
	07/20/2005		9.23	9.64
	08/19/2005		9.44	9.43
	09/16/2005		9.46	9.41
	10/21/2005		9.63	9.24
	11/18/2005		9.44	9.43
	12/16/2005		9.08	9.79

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-36	01/20/2006	18.87	8.05	10.82
	02/22/2006		7.72	11.15
	03/30/2006		6.94	11.93
	04/27/2006		7.60	11.27
	05/18/2006		8.22	10.65
	06/22/2006		8.53	10.34
	07/20/2006		8.49	10.38
	08/17/2006		8.39	10.48
	09/14/2006		8.51	10.36
	10/19/2006		8.51	10.36
	11/21/2006		8.65	10.22
	12/21/2006		8.00	10.87
	01/18/2007		8.55	10.32
	02/06/2007		8.79	10.08
	03/08/2007		8.11	10.76
	04/12/2007		8.56	10.31
	05/10/2007		8.39	10.48
	06/07/2007		8.76	10.11
	07/19/2007		8.70	10.17
	08/09/2007		8.69	10.18
	09/14/2007		8.62	10.25
	10/12/2007		8.32	10.55
	11/09/2007		8.43	10.44
	12/14/2007		8.26	10.61
	01/17/2008		7.97	10.90
	02/21/2008		7.82	11.05
	03/20/2008		8.58	10.29
	04/10/2008		8.93	9.94
	05/08/2008		8.92	9.95
	06/12/2008		8.75	10.12
	07/24/2008		8.98	9.89
	08/14/2008		8.91	9.96
	09/18/2008		8.77	10.10
	10/22/2008		9.05	9.82
	11/13/2008		8.64	10.23
	12/04/2008		8.75	10.12
	01/08/2009		8.37	10.50
	02/11/2009		8.21	10.66
	03/12/2009		7.15	11.72
	04/09/2009		7.95	10.92
	05/20/2009		8.13	10.74
	06/17/2009		8.34	10.53
	07/16/2009		8.37	10.50
	08/13/2009		8.25	10.62
	09/10/2009		8.54	10.33

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-36	10/16/2009	18.87	7.78	11.07
	11/12/2009		8.19	10.68
	12/03/2009		8.34	10.53
	01/14/2010		8.23	10.64
	02/18/2010		7.49	11.38
	03/25/2010		7.64	11.23
	04/23/2010		7.59	11.28
	05/21/2010		8.06	10.81
	06/10/2010		8.31	10.56
	07/23/2010		8.21	10.66
	08/12/2010		8.38	10.49
	09/10/2010		8.43	10.44
	10/15/2010		8.70	10.16
	11/04/2010		8.42	10.45
	12/03/2010		8.16	10.71
	01/28/2011		7.90	10.97
	02/10/2011		8.10	10.77
	03/31/2011		6.66	12.21
	04/19/2011		7.74	11.13
	06/27/2011		8.20	10.67
	07/21/2011		8.23	10.64
	08/22/2011		9.28	9.59
	09/23/2011		11.44	7.43
	09/30/2011		11.80	7.07
	10/05/2011		11.92	6.95
	10/12/2011		12.07	6.80
	10/19/2011		12.30	6.57
	10/26/2011		12.37	6.50
	11/02/2011		12.44	6.43
	11/09/2011		11.93	6.94
	11/16/2011		11.64	7.23
	11/23/2011		11.33	7.54
	11/30/2011		11.17	7.70
	12/06/2011		11.06	7.81
	01/27/2012		9.80	9.07
	02/23/2012		9.45	9.42
	03/20/2012		8.31	10.56
	04/16/2012		7.12	11.75
	05/14/2012		8.35	10.52
	06/11/2012		8.63	10.24
	07/18/2012		8.73	10.14
	08/15/2012		8.63	10.24
	09/13/2012		8.61	10.26
	10/17/2012		8.79	10.08
	11/16/2012		8.44	10.43

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-36	12/14/2012	18.87	7.49	11.38
	01/18/2013		8.04	10.83
	02/22/2013		8.43	10.44
	03/21/2013		8.40	10.47
	04/19/2013		8.07	10.80
	07/16/2013		8.79	10.08
	10/07/2013		9.25	9.62
	01/03/2014		9.05	9.82
	04/22/2014		8.46	10.41
	07/08/2014		9.17	9.70
	10/28/2014		9.35	9.52
LF-37	01/17/2000	18.54	9.38	9.16
	04/25/2000		8.80	9.74
	05/30/2000		9.21	9.33
	06/26/2000		9.84	8.70
	08/10/2000		9.76	8.78
	08/31/2000		9.14	9.40
	09/25/2000		9.35	9.19
	10/06/2000		9.45	9.09
	11/21/2000		9.48	9.06
	12/18/2000		9.20	9.34
	01/15/2001		9.09	9.45
	02/14/2001		8.50	10.04
	03/01/2001		7.95	10.59
	04/19/2001		8.94	9.60
	05/23/2001		9.27	9.27
	06/14/2001		9.43	9.11
	07/02/2001		9.41	9.13
	08/10/2001		9.21	9.33
	09/07/2001		9.29	9.25
	10/18/2001		9.47	9.07
	11/02/2001		9.45	9.09
	12/14/2001		8.24	10.30
	01/18/2002		7.96	10.58
	02/21/2002		8.32	10.22
	03/25/2002		7.44	11.10
	04/18/2002		8.93	9.61
	05/10/2002		9.22	9.32
	06/04/2002		8.86	9.68
	07/10/2002		9.22	9.32
	08/15/2002		9.11	9.43
	09/11/2002		8.86	9.68
	10/08/2002		9.01	9.53
	11/07/2002		9.17	9.37
	12/12/2002		8.95	9.59

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-37	01/13/2003	18.54	8.11	10.43
	02/26/2003		7.47	11.07
	03/19/2003		8.32	10.22
	04/14/2003		8.30	10.24
	05/13/2003		8.41	10.13
	06/13/2003		8.64	9.90
	07/07/2003		8.70	9.84
	08/13/2003		8.87	9.67
	09/17/2003		8.89	9.65
	10/27/2003		NM	NM
	11/18/2003		8.95	9.59
	12/19/2003		8.25	10.29
	01/15/2004		8.03	10.51
	02/17/2004		8.06	10.48
	03/18/2004		8.38	10.16
	04/21/2004		8.90	9.64
	05/18/2004		8.54	10.00
	06/10/2004		8.86	9.68
	07/13/2004		8.88	9.66
	08/12/2004		8.95	9.59
	09/16/2004		9.10	9.44
	10/12/2004		8.99	9.55
	11/17/2004		8.65	9.89
	12/15/2004		8.27	10.27
	01/24/2005		8.05	10.49
	02/15/2005		8.40	10.14
	03/15/2005		8.16	10.38
	04/25/2005		8.19	10.35
	05/20/2005		8.30	10.24
	06/21/2005		8.62	9.92
	07/20/2005		9.01	9.53
	08/19/2005		9.24	9.30
	09/16/2005		9.24	9.30
	10/21/2005		9.39	9.15
	11/18/2005		9.21	9.33
	12/16/2005		8.84	9.70
	01/20/2006		7.70	10.84
	02/22/2006		7.60	10.94
	03/30/2006		6.60	11.94
	04/27/2006		7.26	11.28
	05/18/2006		7.93	10.61
	06/22/2006		8.26	10.28
	07/20/2006		8.24	10.30
	08/17/2006		8.19	10.35
	09/14/2006		8.26	10.28

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-37	10/19/2006	18.54	8.24	10.30
	11/21/2006		8.42	10.12
	12/21/2006		7.67	10.87
	01/18/2007		8.13	10.41
	02/06/2007		8.42	10.12
	03/08/2007		7.84	10.70
	04/12/2007		8.26	10.28
	05/10/2007		8.15	10.39
	06/07/2007		8.54	10.00
	07/19/2007		8.43	10.11
	08/09/2007		8.42	10.12
	09/14/2007		8.28	10.26
	10/12/2007		8.02	10.52
	11/09/2007		8.07	10.47
	12/14/2007		7.93	10.61
	01/17/2008		7.67	10.87
	02/21/2008		7.50	11.04
	03/20/2008		8.31	10.23
	04/10/2008		8.77	9.77
	05/08/2008		8.73	9.81
	06/12/2008		8.51	10.03
	07/24/2008		8.79	9.75
	08/14/2008		8.69	9.85
	09/18/2008		8.47	10.07
	10/22/2008		8.82	9.72
	11/13/2008		8.41	10.13
	12/04/2008		8.49	10.05
	01/08/2009		8.13	10.41
	02/11/2009		7.94	10.60
	03/12/2009		6.74	11.80
	04/09/2009		7.70	10.84
	05/20/2009		7.86	10.68
	06/17/2009		8.06	10.48
	07/16/2009		8.14	10.40
	08/13/2009		8.01	10.53
	09/10/2009		8.30	10.24
	10/16/2009		7.47	11.05
	11/12/2009		7.87	10.67
	12/03/2009		8.05	10.49
	01/14/2010		7.99	10.55
	02/18/2010		7.13	11.41
	03/25/2010		7.35	11.19
	04/23/2010		7.26	11.28
	05/21/2010		7.80	10.74
	06/10/2010		8.08	10.46

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-37	07/23/2010	18.54	7.95	10.59
	08/12/2010		8.10	10.44
	09/10/2010		8.19	10.35
	10/15/2010		8.45	10.08
	11/04/2010		8.16	10.38
	12/03/2010		7.91	10.63
	01/28/2011		7.54	11.00
	02/10/2011		7.73	10.81
	03/31/2011		6.28	12.26
	04/19/2011		7.41	11.13
	03/20/2012		8.02	10.52
	04/16/2012		6.81	11.73
	05/14/2012		8.00	10.54
	06/11/2012		8.29	10.25
	07/18/2012		8.39	10.15
	08/15/2012		8.31	10.23
	09/13/2012		8.33	10.21
	10/17/2012		8.50	10.04
	11/16/2012		8.14	10.40
	12/14/2012		7.13	11.41
	01/18/2013		7.70	10.84
	02/22/2013		8.10	10.44
	03/21/2013		8.11	10.43
	04/19/2013		7.80	10.74
	07/16/2013		8.48	10.06
	10/07/2013		8.96	9.58
	01/03/2014		8.73	9.81
	04/22/2014		8.14	10.40
	07/08/2014		8.87	9.67
	10/28/2014		9.05	9.49
LF-38	01/17/2000	18.51	9.44	9.07
	04/25/2000		8.74	9.77
	05/30/2000		9.46	9.05
	06/26/2000		9.78	8.73
	08/10/2000		9.82	8.69
	08/31/2000		9.28	9.23
	09/25/2000		9.30	9.21
	10/06/2000		10.17	8.34
	11/21/2000		9.41	9.10
	12/18/2000		9.11	9.40
	01/15/2001		9.11	9.40
	02/14/2001		8.66	9.85
	03/01/2001		7.98	10.53
	04/19/2001		8.92	9.59
	05/23/2001		9.26	9.25

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-38	06/14/2001	18.51	9.29	9.22
	07/02/2001		9.28	9.23
	08/10/2001		9.07	9.44
	09/07/2001		9.13	9.38
	10/18/2001		9.86	8.65
	11/02/2001		9.33	9.18
	12/14/2001		8.02	10.49
	01/18/2002		7.96	10.55
	02/21/2002		8.28	10.23
	03/25/2002		7.39	11.12
	04/18/2002		8.84	9.67
	05/10/2002		9.09	9.42
	06/04/2002		9.06	9.45
	07/10/2002		9.50	9.01
	08/15/2002		9.04	9.47
	09/11/2002		8.65	9.86
	10/08/2002		8.91	9.60
	11/07/2002		9.05	9.46
	12/12/2002		8.78	9.73
	01/13/2003		7.46	11.05
	02/26/2003		7.51	11.00
	03/19/2003		8.22	10.29
	04/14/2003		8.30	10.21
	05/13/2003		8.42	10.09
	06/13/2003		8.60	9.91
	07/07/2003		8.63	9.88
	08/13/2003		8.77	9.74
	09/17/2003		8.80	9.71
	10/27/2003		NM	NM
	11/18/2003		8.88	9.63
	12/19/2003		8.30	10.21
	01/15/2004		8.10	10.41
	02/17/2004		8.05	10.46
	03/18/2004		8.35	10.16
	04/21/2004		8.69	9.82
	05/18/2004		8.55	9.96
	06/10/2004		8.94	9.57
	07/13/2004		8.88	9.63
	08/12/2004		8.85	9.66
	09/16/2004		9.00	9.51
	10/12/2004		8.91	9.60
	11/17/2004		8.60	9.91
	12/15/2004		8.49	10.02
	01/24/2005		7.98	10.53
	02/15/2005		8.40	10.11

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-38	03/15/2005	18.51	7.27	11.24
	04/25/2005		8.16	10.35
	05/20/2005		8.24	10.27
	06/21/2005		8.45	10.06
	07/20/2005		8.90	9.61
	08/19/2005		9.04	9.47
	09/16/2005		9.14	9.37
	10/21/2005		9.26	9.25
	11/18/2005		9.11	9.40
	12/16/2005		8.89	9.62
	01/20/2006		7.70	10.81
	02/22/2006		7.70	10.81
	03/30/2006		7.21	11.30
	04/27/2006		7.31	11.20
	05/18/2006		7.80	10.71
	06/22/2006		8.10	10.41
	07/20/2006		8.18	10.33
	08/17/2006		8.17	10.34
	09/14/2006		8.18	10.33
	10/19/2006		8.12	10.39
	11/21/2006		8.22	10.29
	12/21/2006		7.68	10.83
	01/18/2007		7.99	10.52
	02/06/2007		8.30	10.21
	03/08/2007		7.85	10.66
	04/12/2007		8.12	10.39
	05/10/2007		8.19	10.32
	06/07/2007		8.42	10.09
	07/19/2007		8.41	10.10
	08/09/2007		8.41	10.10
	09/14/2007		8.32	10.19
	10/12/2007		7.93	10.58
	11/09/2007		7.91	10.60
	12/14/2007		7.67	10.84
	01/17/2008		7.76	10.75
	02/21/2008		7.45	11.06
	03/20/2008		8.25	10.26
	04/10/2008		8.66	9.85
	05/08/2008		8.67	9.84
	06/12/2008		8.43	10.08
	07/24/2008		8.68	9.83
	08/14/2008		8.59	9.92
	09/18/2008		8.41	10.10
	10/22/2008		8.70	9.81
	11/13/2008		8.41	10.10

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-38	12/04/2008	18.51	8.44	10.07
	01/08/2009		8.06	10.45
	02/11/2009		8.07	10.44
	03/12/2009		6.89	11.62
	04/09/2009		7.59	10.92
	05/20/2009		7.84	10.67
	06/17/2009		7.98	10.53
	07/16/2009		8.10	10.41
	08/13/2009		8.09	10.42
	09/10/2009		8.16	10.35
	10/16/2009		7.45	11.04
	11/12/2009		7.81	10.70
	12/03/2009		7.99	10.52
	01/14/2010		7.99	10.52
	02/18/2010		7.47	11.04
	03/25/2010		7.30	11.21
	04/23/2010		7.27	11.24
	05/21/2010		7.75	10.76
	06/10/2010		8.00	10.51
	07/23/2010		7.89	10.62
	08/12/2010		8.04	10.47
	09/10/2010		8.12	10.39
	10/15/2010		8.39	10.11
	11/04/2010		8.09	10.42
	12/03/2010		7.88	10.63
	01/28/2011		7.48	11.03
	02/10/2011		7.67	10.84
	03/31/2011		6.43	12.08
	04/19/2011		7.21	11.30
	03/20/2012		8.05	10.46
	04/16/2012		6.85	11.66
	05/14/2012		7.94	10.57
	06/11/2012		8.25	10.26
	07/18/2012		8.32	10.19
	08/15/2012		8.25	10.26
	09/13/2012		8.26	10.25
	10/17/2012		8.42	10.09
	11/16/2012		8.05	10.46
	12/14/2012		7.13	11.38
	01/18/2013		7.65	10.86
	02/22/2013		8.06	10.45
	03/21/2013		8.08	10.43
	04/19/2013		7.75	10.76
	07/16/2013		8.42	10.09
	10/07/2013		8.90	9.61

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-38	01/03/2014	18.51	8.76	9.75
	04/22/2014		8.11	10.40
	07/08/2014		8.82	9.69
	10/28/2014		9.01	9.50
LF-39	01/17/2000	18.97	9.75	9.22
	04/25/2000		9.12	9.85
	05/30/2000		9.50	9.47
	06/26/2000		9.78	9.19
	08/10/2000		10.04	8.93
	08/31/2000		9.48	9.49
	09/25/2000		9.74	9.23
	10/06/2000		9.83	9.14
	11/21/2000		9.75	9.22
	12/18/2000		9.46	9.51
	01/15/2001		9.39	9.58
	02/14/2001		8.81	10.16
	03/01/2001		8.31	10.66
	04/19/2001		9.26	9.71
	05/23/2001		9.69	9.28
	06/14/2001		9.73	9.24
	07/02/2001		9.75	9.22
	08/10/2001		9.34	9.63
	09/07/2001		9.44	9.53
	10/18/2001		9.75	9.22
	11/02/2001		9.70	9.27
	12/14/2001		8.35	10.62
	01/18/2002		8.46	10.51
	02/21/2002		8.74	10.23
	03/25/2002		7.83	11.14
	04/18/2002		9.30	9.67
	05/10/2002		9.56	9.41
	06/04/2002		9.15	9.82
	07/10/2002		9.52	9.45
	08/15/2002		9.48	9.49
	09/11/2002		9.24	9.73
	10/08/2002		9.34	9.63
	11/07/2002		9.36	9.61
	12/12/2002		9.30	9.67
	01/13/2003		7.89	11.08
	02/26/2003		8.01	10.96
	03/19/2003		8.75	10.22
	04/14/2003		8.63	10.34
	05/13/2003		8.76	10.21
	06/13/2003		9.05	9.92
	07/07/2003		9.01	9.96

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-39	08/13/2003	18.97	9.24	9.73
	09/17/2003		9.27	9.70
	10/27/2003		9.47	9.50
	11/18/2003		9.27	9.70
	12/19/2003		8.63	10.34
	01/15/2004		8.45	10.52
	02/17/2004		8.35	10.62
	03/18/2004		8.83	10.14
	04/21/2004		9.24	9.73
	05/18/2004		9.30	9.67
	06/10/2004		9.21	9.76
	07/13/2004		9.23	9.74
	08/12/2004		9.30	9.67
	09/16/2004		9.45	9.52
	10/12/2004		9.34	9.63
	11/17/2004		8.96	10.01
	12/15/2004		8.60	10.37
	01/24/2005		8.46	10.51
	02/15/2005		8.78	10.19
	03/15/2005		8.53	10.44
	04/25/2005		8.53	10.44
	05/20/2005		8.56	10.41
	06/21/2005		9.00	9.97
	07/20/2005		9.38	9.59
	08/19/2005		9.55	9.42
	09/16/2005		9.58	9.39
	10/21/2005		9.71	9.26
	11/18/2005		9.52	9.45
	12/16/2005		9.17	9.80
	01/20/2006		8.10	10.87
	02/22/2006		8.02	10.95
	03/30/2006		7.15	11.82
	04/27/2006		7.77	11.20
	05/18/2006		8.37	10.60
	06/22/2006		8.70	10.27
	07/20/2006		8.66	10.31
	08/17/2006		8.57	10.40
	09/14/2006		8.67	10.30
	10/19/2006		8.68	10.29
	11/21/2006		8.77	10.20
	12/21/2006		8.07	10.90
	01/18/2007		8.65	10.32
	02/06/2007		8.92	10.05
	03/08/2007		8.27	10.70
	04/12/2007		8.71	10.26

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-39	05/10/2007	18.97	8.53	10.44
	06/07/2007		8.90	10.07
	07/19/2007		8.85	10.12
	08/09/2007		8.83	10.14
	09/14/2007		8.69	10.28
	10/12/2007		NM	NM
	11/09/2007		NM	NM
	12/14/2007		8.36	10.61
	01/17/2008		8.07	10.90
	02/21/2008		NM	NM
	03/20/2008		NM	NM
	04/10/2008		NM	NM
	05/08/2008		9.10	9.87
	06/12/2008		8.91	10.06
	07/24/2008		NM	NM
	08/14/2008		NM	NM
	09/18/2008		8.89	10.08
	10/22/2008		9.21	9.76
	11/13/2008		8.72	10.25
	12/04/2008		NM	NM
	01/08/2009		8.45	10.52
	02/11/2009		8.31	10.66
	03/12/2009		7.25	11.72
	04/09/2009		8.13	10.84
	05/20/2009		8.32	10.65
	06/17/2009		8.48	10.49
	07/16/2009		8.60	10.37
	08/13/2009		8.42	10.55
	09/10/2009		8.72	10.25
	10/16/2009		7.89	11.06
	11/12/2009		8.29	10.68
	12/03/2009		8.46	10.51
	01/14/2010		8.39	10.58
	02/18/2010		7.58	11.39
	03/25/2010		7.79	11.18
	04/23/2010		7.72	11.25
	05/21/2010		8.24	10.73
	06/10/2010		8.49	10.48
	07/23/2010		8.39	10.58
	08/12/2010		8.51	10.46
	09/10/2010		8.64	10.33
	10/15/2010		8.91	10.05
	11/04/2010		8.55	10.42
	12/03/2010		8.30	10.67
	01/28/2011		8.00	10.97

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-39	02/10/2011	18.97	8.26	10.71
	03/31/2011		6.80	12.17
	04/19/2011		7.93	11.04
	03/20/2012		8.40	10.57
	04/16/2012		7.29	11.68
	05/14/2012		8.40	10.57
	06/11/2012		8.68	10.29
	07/18/2012		8.79	10.18
	08/15/2012		8.72	10.25
	09/13/2012		8.72	10.25
	10/17/2012		8.85	10.12
	11/16/2012		8.52	10.45
	12/14/2012		7.61	11.36
	01/18/2013		8.11	10.86
	02/22/2013		8.51	10.46
	03/21/2013		8.48	10.49
	04/19/2013		8.21	10.76
	07/16/2013		8.92	10.05
	10/07/2013		9.31	9.66
	01/03/2014		9.15	9.82
	04/22/2014		8.55	10.42
	07/08/2014		9.19	9.78
	10/28/2014		9.40	9.57
LF-4	06/14/1989	15.31	7.14	8.61
	01/10/1990 (a)		6.71	9.04
	01/18/1990 (b)		5.64	10.11
	01/18/1990 (c)		5.70	10.05
	01/30/1991		7.23	8.52
	06/19/1991		7.12	8.63
	12/16/1991		7.33	8.42
	07/10/1992		7.21	8.54
	12/30/1992		5.84	9.91
	06/08/1993		6.86	8.89
	01/05/1994		NM	NM
	04/24/1996		6.72	8.51
	07/29/1996		NM	NM
	12/13/1996		5.62	9.61
	04/15/1997		NM	NM
	09/19/1997		6.37	8.86
	12/03/1997		5.64	9.59
	12/15/1997		4.29	10.94
	01/13/1998		4.24	10.99
	01/30/1998		3.33	11.90
	02/24/1998		3.58	11.65
	04/06/1998		5.92	9.31

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-4	07/02/1998	15.31	7.68	7.55
	07/13/1998		7.81	7.50
	09/28/1998		8.38	6.93
	10/16/1998		8.54	6.77
	01/08/1999		6.64	8.67
	04/16/1999		6.20	9.11
	06/21/1999		9.73	5.58
	07/12/1999		9.52	5.79
	10/08/1999		9.79	5.52
	01/17/2000		8.92	6.39
	04/25/2000		5.03	10.28
	05/30/2000		6.00	9.31
	06/26/2000		NM	NM
	08/10/2000		8.41	6.90
	10/06/2000		8.46	6.85
	01/15/2001		6.56	8.75
	04/19/2001		5.42	9.89
	07/02/2001		8.31	7.00
	09/07/2001		NM	NM
	10/18/2001		8.20	7.11
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		4.83	10.48
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		7.68	7.63
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		7.31	8.00
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		8.15	7.16
	01/13/2003		5.72	9.59
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		7.61	7.70
	07/07/2003		8.80	6.51
	10/27/2003		NM	NM
	11/18/2003		8.32	6.99
	01/15/2004		7.10	8.21
	04/21/2004		8.28	7.03
	07/13/2004		8.99	6.32
	10/12/2004		8.10	7.21
	01/24/2005		6.01	9.30
	04/25/2005		6.98	8.33

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-4	07/20/2005	15.31	9.00	6.31
	10/21/2005		9.42	5.89
	01/23/2006		4.22	11.09
	04/27/2006		6.20	9.11
	07/20/2006		8.79	6.52
	10/19/2006		8.52	6.79
	01/18/2007		7.15	8.16
	04/12/2007		8.33	6.98
	07/19/2007		9.44	5.87
	08/17/2007		8.91	6.40
	08/24/2007		8.69	6.62
	08/30/2007		8.46	6.85
	09/06/2007		8.24	7.07
	09/14/2007		8.13	7.18
	09/21/2007		7.94	7.37
	09/28/2007		7.77	7.54
	10/05/2007		7.62	7.69
	10/12/2007		7.21	8.10
	10/19/2007		NM	NM
	10/26/2007		6.23	9.08
	11/02/2007		6.15	9.16
	11/09/2007		6.10	9.21
	11/15/2007		5.66	9.65
	11/21/2007		5.57	9.74
	11/29/2007		5.56	9.75
	01/17/2008		6.16	9.15
	04/10/2008		9.11	6.20
	07/24/2008		9.47	5.84
	10/22/2008		9.67	5.64
	01/08/2009		7.17	8.14
	04/09/2009		6.61	8.70
	07/16/2009		8.80	6.51
	10/16/2009		6.53	8.76
	01/14/2010		D	NM
	04/23/2010		6.13	9.18
	07/23/2010		8.76	6.55
	10/15/2010		9.31	5.99
	01/28/2011		6.20	9.11
	04/19/2011		5.81	9.50
LF-40	01/17/2000	18.84	9.61	9.23
	04/25/2000		9.00	9.84
	05/30/2000		9.43	9.41
	06/26/2000		9.84	9.00
	08/10/2000		10.02	8.82
	08/31/2000		9.40	9.44

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-40	09/25/2000	18.84	9.67	9.17
	10/06/2000		9.75	9.09
	11/21/2000		9.68	9.16
	12/18/2000		9.39	9.45
	01/15/2001		9.36	9.48
	02/14/2001		8.74	10.10
	03/01/2001		8.25	10.59
	04/19/2001		9.12	9.72
	05/23/2001		9.58	9.26
	06/14/2001		9.70	9.14
	07/02/2001		9.71	9.13
	08/10/2001		9.48	9.36
	09/07/2001		9.49	9.35
	10/18/2001		9.39	9.45
	11/02/2001		9.64	9.20
	12/14/2001		8.26	10.58
	01/18/2002		8.19	10.65
	02/21/2002		8.54	10.30
	03/25/2002		7.73	11.11
	04/18/2002		9.22	9.62
	05/10/2002		9.51	9.33
	06/04/2002		9.25	9.59
	07/10/2002		9.43	9.41
	08/15/2002		9.34	9.50
	09/11/2002		9.05	9.79
	10/08/2002		9.21	9.63
	11/07/2002		9.42	9.42
	12/12/2002		9.21	9.63
	01/13/2003		7.68	11.16
	02/26/2003		7.74	11.10
	03/19/2003		8.57	10.27
	04/14/2003		8.60	10.24
	05/13/2003		8.65	10.19
	06/13/2003		8.91	9.93
	07/07/2003		8.91	9.93
	08/13/2003		9.10	9.74
	09/17/2003		9.15	9.69
	10/27/2003		9.35	9.49
	11/18/2003		9.18	9.66
	12/19/2003		8.50	10.34
	01/15/2004		8.23	10.61
	02/17/2004		8.31	10.53
	03/18/2004		8.69	10.15
	04/21/2004		9.21	9.63
	05/18/2004		9.25	9.59

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-40	06/10/2004	18.84	9.10	9.74
	07/13/2004		9.14	9.70
	08/12/2004		9.23	9.61
	09/16/2004		9.35	9.49
	10/12/2004		9.21	9.63
	11/17/2004		8.88	9.96
	12/15/2004		8.50	10.34
	01/24/2005		8.33	10.51
	02/15/2005		8.73	10.11
	03/15/2005		8.35	10.49
	04/25/2005		8.43	10.41
	05/20/2005		8.70	10.14
	06/21/2005		8.85	9.99
	07/20/2005		9.34	9.50
	08/19/2005		9.54	9.30
	09/16/2005		9.55	9.29
	10/21/2005		9.66	9.18
	11/18/2005		9.58	9.26
	12/16/2005		9.19	9.65
	01/20/2006		7.85	10.99
	02/22/2006		7.95	10.89
	03/30/2006		7.30	11.54
	04/27/2006		7.55	11.29
	05/18/2006		8.14	10.70
	06/22/2006		8.50	10.34
	07/20/2006		8.54	10.30
	08/17/2006		8.43	10.41
	09/14/2006		8.53	10.31
	10/19/2006		8.56	10.28
	11/21/2006		8.66	10.18
	12/21/2006		7.92	10.92
	01/18/2007		8.42	10.42
	02/06/2007		8.73	10.11
	03/08/2007		8.24	10.60
	04/12/2007		8.58	10.26
	05/10/2007		8.56	10.28
	06/07/2007		8.85	9.99
	07/19/2007		8.78	10.06
	08/09/2007		8.65	10.19
	09/14/2007		8.51	10.33
	10/12/2007		8.29	10.55
	11/09/2007		8.29	10.55
	12/14/2007		8.14	10.70
	01/17/2008		7.97	10.87
	02/21/2008		7.82	11.02

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-40	03/20/2008	18.84	8.59	10.25
	04/10/2008		9.10	9.74
	05/08/2008		9.05	9.79
	06/12/2008		8.80	10.04
	07/24/2008		9.01	9.83
	08/14/2008		8.91	9.93
	09/18/2008		8.73	10.11
	10/22/2008		9.13	9.71
	11/13/2008		NM	NM
	12/04/2008		8.73	10.11
	01/08/2009		8.39	10.45
	02/11/2009		8.22	10.62
	03/12/2009		7.04	11.80
	04/09/2009		8.04	10.80
	05/20/2009		8.22	10.62
	06/17/2009		8.31	10.53
	07/16/2009		8.49	10.35
	08/13/2009		8.27	10.57
	09/10/2009		8.61	10.23
	10/16/2009		7.76	11.06
	11/12/2009		8.12	10.72
	12/03/2009		8.29	10.55
	01/14/2010		8.25	10.59
	02/18/2010		7.38	11.46
	03/25/2010		7.55	11.29
	04/23/2010		7.55	11.29
	05/21/2010		8.13	10.71
	06/10/2010		8.38	10.46
	07/23/2010		8.21	10.63
	08/12/2010		8.36	10.48
	09/10/2010		8.51	10.33
	10/15/2010		8.80	10.03
	11/04/2010		8.39	10.45
	12/03/2010		8.15	10.69
	01/28/2011		7.82	11.02
	02/10/2011		7.98	10.86
	03/31/2011		6.56	12.28
	04/19/2011		7.62	11.22
	03/20/2012		8.40	10.44
	04/16/2012		7.15	11.69
	05/14/2012		8.22	10.62
	06/11/2012		8.54	10.30
	07/18/2012		8.63	10.21
	08/15/2012		8.54	10.30
	09/13/2012		8.59	10.25

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-40	10/17/2012	18.84	8.72	10.12
	11/16/2012		8.45	10.39
	12/14/2012		7.43	11.41
	01/18/2013		7.93	10.91
	02/22/2013		8.29	10.55
	03/21/2013		8.33	10.51
	04/19/2013		8.05	10.79
	07/16/2013		8.77	10.07
	10/07/2013		9.16	9.68
	01/03/2014		8.99	9.85
	04/22/2014		8.39	10.45
	07/08/2014		9.08	9.76
	10/28/2014		9.30	9.54
LF-41	01/17/2000	18.24	9.01	9.23
	04/25/2000		8.41	9.83
	05/30/2000		8.75	9.49
	06/26/2000		9.02	9.22
	08/10/2000		9.25	8.99
	08/31/2000		8.74	9.50
	09/25/2000		8.95	9.29
	10/06/2000		9.00	9.24
	11/21/2000		7.99	10.25
	12/18/2000		8.76	9.48
	01/15/2001		8.63	9.61
	02/14/2001		8.06	10.18
	03/01/2001		7.55	10.69
	04/19/2001		8.49	9.75
	05/23/2001		8.82	9.42
	06/14/2001		8.95	9.29
	07/02/2001		8.97	9.27
	08/10/2001		8.71	9.53
	09/07/2001		8.78	9.46
	10/18/2001		8.98	9.26
	11/02/2001		8.95	9.29
	12/14/2001		7.20	11.04
	01/18/2002		7.68	10.56
	02/21/2002		7.84	10.40
	03/25/2002		7.96	10.28
	04/18/2002		8.49	9.75
	05/10/2002		8.74	9.50
	06/04/2002		8.49	9.75
	07/10/2002		8.78	9.46
	08/15/2002		8.71	9.53
	09/11/2002		8.46	9.78
	10/08/2002		8.61	9.63

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-41	11/07/2002	18.24	8.71	9.53
	12/12/2002		8.72	9.52
	01/13/2003		7.08	11.16
	02/26/2003		7.14	11.10
	03/19/2003		7.93	10.31
	04/14/2003		7.83	10.41
	05/13/2003		8.01	10.23
	06/13/2003		8.26	9.98
	07/07/2003		8.31	9.93
	08/13/2003		8.44	9.80
	09/17/2003		8.49	9.75
	10/27/2003		8.68	9.56
	11/18/2003		8.50	9.74
	12/19/2003		7.82	10.42
	01/15/2004		7.67	10.57
	02/17/2004		7.61	10.63
	03/18/2004		7.88	10.36
	04/21/2004		8.45	9.79
	05/18/2004		8.52	9.72
	06/10/2004		8.42	9.82
	07/13/2004		8.45	9.79
	08/12/2004		8.50	9.74
	09/16/2004		8.68	9.56
	10/12/2004		8.58	9.66
	11/17/2004		8.19	10.05
	12/15/2004		7.78	10.46
	01/24/2005		7.63	10.61
	02/15/2005		7.81	10.43
	03/15/2005		7.56	10.68
	04/25/2005		7.78	10.46
	05/20/2005		7.89	10.35
	06/21/2005		8.15	10.09
	07/20/2005		8.59	9.65
	08/19/2005		8.78	9.46
	09/16/2005		8.80	9.44
	10/21/2005		8.95	9.29
	11/18/2005		8.76	9.48
	12/16/2005		8.41	9.83
	01/20/2006		7.34	10.90
	02/22/2006		7.15	11.09
	03/30/2006		6.50	11.74
	04/27/2006		6.88	11.36
	05/18/2006		7.51	10.73
	06/22/2006		7.81	10.43
	07/20/2006		7.83	10.41

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-41	08/17/2006	18.24	7.67	10.57
	09/14/2006		7.81	10.43
	10/19/2006		7.74	10.50
	11/21/2006		7.75	10.49
	12/21/2006		7.22	11.02
	01/18/2007		7.64	10.60
	02/06/2007		8.10	10.14
	03/08/2007		7.41	10.83
	04/12/2007		7.82	10.42
	05/10/2007		7.74	10.50
	06/07/2007		8.02	10.22
	07/19/2007		7.99	10.25
	08/09/2007		8.00	10.24
	09/14/2007		7.87	10.37
	10/12/2007		7.63	10.61
	11/09/2007		7.66	10.58
	12/14/2007		7.45	10.79
	01/17/2008		7.30	10.94
	02/21/2008		7.11	11.13
	03/20/2008		7.71	10.53
	04/10/2008		8.25	9.99
	05/08/2008		8.22	10.02
	06/12/2008		8.05	10.19
	07/24/2008		8.28	9.96
	08/14/2008		8.20	10.04
	09/18/2008		8.02	10.22
	10/22/2008		8.34	9.90
	11/13/2008		7.91	10.33
	12/04/2008		8.00	10.24
	01/08/2009		7.68	10.56
	02/11/2009		7.48	10.76
	03/12/2009		6.42	11.82
	04/09/2009		7.25	10.99
	05/20/2009		7.44	10.80
	06/17/2009		7.61	10.63
	07/16/2009		7.71	10.53
	08/13/2009		7.55	10.69
	09/10/2009		7.82	10.42
	10/16/2009		7.04	11.18
	11/12/2009		7.47	10.77
	12/03/2009		7.61	10.63
	01/14/2010		7.54	10.70
	02/18/2010		6.80	11.44
	03/25/2010		6.93	11.31
	04/23/2010		6.87	11.37

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-41	05/21/2010	18.24	7.45	10.79
	06/10/2010		7.67	10.57
	07/23/2010		7.59	10.65
	08/12/2010		7.69	10.55
	09/10/2010		7.76	10.48
	10/15/2010		8.02	10.21
	11/04/2010		7.72	10.52
	12/03/2010		7.47	10.77
	01/28/2011		7.20	11.04
	02/10/2011		7.39	10.85
	03/31/2011		5.95	12.29
	04/19/2011		7.07	11.17
	06/27/2011		7.53	10.71
	07/21/2011		7.60	10.64
	08/22/2011		8.71	9.53
	09/23/2011		11.33	6.91
	09/30/2011		11.64	6.60
	10/05/2011		11.72	6.52
	10/12/2011		11.78	6.46
	10/19/2011		13.95	4.29
	10/26/2011		14.14	4.10
	11/02/2011		13.78	4.46
	11/09/2011		13.02	5.22
	11/16/2011		10.91	7.33
	11/23/2011		10.59	7.65
	11/30/2011		10.41	7.83
	12/06/2011		10.32	7.92
	01/27/2012		8.96	9.28
	02/23/2012		8.57	9.67
	03/20/2012		7.56	10.68
	04/16/2012		6.35	11.89
	05/14/2012		7.59	10.65
	06/11/2012		7.86	10.38
	07/18/2012		7.94	10.30
	08/15/2012		7.87	10.37
	09/13/2012		7.85	10.39
	10/17/2012		8.01	10.23
	11/16/2012		7.68	10.56
	12/14/2012		6.78	11.46
	01/18/2013		7.30	10.94
	02/22/2013		7.64	10.60
	03/21/2013		7.64	10.60
	04/19/2013		7.35	10.89
	07/16/2013		8.06	10.18
	10/07/2013		8.52	9.72

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-41	01/03/2014	18.24	8.26	9.98
	04/22/2014		7.76	10.48
	07/08/2014		8.44	9.80
	10/28/2014		8.61	9.63
LF-42	01/17/2000	17.29	8.17	9.12
	04/25/2000		7.51	9.78
	05/30/2000		8.03	9.26
	06/26/2000		8.34	8.95
	08/10/2000		8.60	8.69
	08/31/2000		7.95	9.34
	09/25/2000		8.15	9.14
	10/06/2000		8.29	9.00
	11/21/2000		8.28	9.01
	12/18/2000		8.03	9.26
	01/15/2001		7.84	9.45
	02/14/2001		7.31	9.98
	03/01/2001		6.58	10.71
	04/19/2001		7.67	9.62
	05/23/2001		8.20	9.09
	06/14/2001		8.51	8.78
	07/02/2001		8.31	8.98
	08/10/2001		8.23	9.06
	09/07/2001		8.37	8.92
	10/18/2001		8.33	8.96
	11/02/2001		8.36	8.93
	12/14/2001		6.93	10.36
	01/18/2002		6.68	10.61
	02/21/2002		7.20	10.09
	03/25/2002		7.31	9.98
	04/18/2002		7.65	9.64
	05/10/2002		7.87	9.42
	06/04/2002		7.85	9.44
	07/10/2002		8.09	9.20
	08/15/2002		8.09	9.20
	09/11/2002		8.16	9.13
	10/08/2002		7.69	9.60
	11/07/2002		7.85	9.44
	12/12/2002		7.76	9.53
	01/13/2003		6.33	10.96
	02/26/2003		6.22	11.07
	03/19/2003		7.21	10.08
	04/14/2003		7.32	9.97
	05/13/2003		7.44	9.85
	06/13/2003		7.34	9.95
	07/07/2003		7.28	10.01

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-42	08/13/2003	17.29	7.48	9.81
	09/17/2003		7.67	9.62
	10/27/2003		7.74	9.55
	11/18/2003		7.75	9.54
	12/19/2003		7.32	9.97
	01/15/2004		6.58	10.71
	02/17/2004		7.11	10.18
	03/18/2004		7.37	9.92
	04/21/2004		7.64	9.65
	05/18/2004		7.53	9.76
	06/10/2004		7.66	9.63
	07/13/2004		7.75	9.54
	08/12/2004		7.88	9.41
	09/16/2004		7.90	9.39
	10/12/2004		7.81	9.48
	11/17/2004		7.57	9.72
	12/15/2004		7.22	10.07
	01/24/2005		6.88	10.41
	02/15/2005		7.43	9.86
	03/15/2005		7.00	10.29
	04/25/2005		7.10	10.19
	05/20/2005		7.12	10.17
	06/21/2005		7.45	9.84
	07/20/2005		8.05	9.24
	08/19/2005		8.10	9.19
	09/16/2005		8.11	9.18
	10/21/2005		8.18	9.11
	11/18/2005		8.23	9.06
	12/16/2005		8.10	9.19
	01/20/2006		6.34	10.95
	02/22/2006		6.61	10.68
	03/30/2006		5.14	12.15
	04/27/2006		5.86	11.43
	05/18/2006		6.79	10.50
	06/22/2006		7.24	10.05
	07/20/2006		7.27	10.02
	08/17/2006		7.42	9.87
	09/14/2006		7.36	9.93
	10/19/2006		7.19	10.10
	11/21/2006		7.25	10.04
	12/21/2006		6.51	10.78
	01/18/2007		7.00	10.29
	02/06/2007		7.28	10.01
	03/08/2007		6.53	10.76
	04/12/2007		7.09	10.20

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-42	05/10/2007	17.29	6.92	10.37
	06/07/2007		7.46	9.83
	07/19/2007		7.23	10.06
	08/09/2007		7.30	9.99
	08/17/2007		7.23	10.06
	08/24/2007		7.15	10.14
	08/30/2007		7.40	9.89
	09/06/2007		7.10	10.19
	09/14/2007		7.02	10.27
	09/21/2007		6.96	10.33
	09/28/2007		6.92	10.37
	10/05/2007		6.94	10.35
	10/12/2007		6.85	10.44
	10/19/2007		6.54	10.75
	10/26/2007		6.56	10.73
	11/02/2007		6.64	10.65
	11/09/2007		6.76	10.53
	11/15/2007		6.67	10.62
	11/21/2007		6.65	10.64
	11/29/2007		6.75	10.54
	12/14/2007		6.70	10.59
	01/17/2008		6.46	10.83
	02/21/2008		6.18	11.11
	03/20/2008		7.28	10.01
	04/10/2008		7.82	9.47
	05/08/2008		7.61	9.68
	06/12/2008		7.56	9.73
	07/24/2008		7.70	9.59
	08/14/2008		7.68	9.61
	09/18/2008		7.35	9.94
	10/22/2008		7.71	9.58
	11/13/2008		7.45	9.84
	12/04/2008		7.49	9.80
	01/08/2009		7.01	10.28
	02/11/2009		6.84	10.45
	03/12/2009		5.34	11.95
	04/09/2009		6.54	10.75
	05/20/2009		6.68	10.61
	06/17/2009		6.97	10.32
	07/16/2009		7.05	10.24
	08/13/2009		6.95	10.34
	09/10/2009		7.17	10.12
	10/16/2009		6.29	10.98
	11/12/2009		6.80	10.49
	12/03/2009		6.96	10.33

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-42	01/14/2010	17.29	6.97	10.32
	02/18/2010		5.81	11.48
	03/25/2010		6.13	11.16
	04/23/2010		6.10	11.19
	05/21/2010		6.67	10.62
	06/10/2010		6.99	10.30
	07/23/2010		6.90	10.39
	08/12/2010		6.97	10.32
	09/10/2010		6.96	10.33
	10/15/2010		7.35	9.93
	11/04/2010		7.08	10.21
	12/03/2010		6.82	10.47
	01/28/2011		6.23	11.06
	02/10/2011		6.57	10.72
	03/31/2011		4.82	12.47
	04/19/2011		6.08	11.21
	03/20/2012		6.36	10.93
	04/16/2012		5.73	11.56
	05/14/2012		6.78	10.51
	06/11/2012		7.23	10.06
	07/18/2012		7.31	9.98
	08/15/2012		7.33	9.96
	09/13/2012		7.32	9.97
	10/17/2012		7.43	9.86
	11/16/2012		7.08	10.21
	12/14/2012		5.95	11.34
	01/18/2013		6.50	10.79
	02/22/2013		7.06	10.23
	03/21/2013		7.08	10.21
	04/19/2013		6.76	10.53
	07/16/2013		7.48	9.81
	10/07/2013		7.89	9.40
	01/03/2014		7.70	9.59
	04/22/2014		6.95	10.34
	07/08/2014		7.82	9.47
	10/28/2014		8.02	9.27
LF-5	06/14/1989	13.18	4.75	8.43
	01/10/1990 (a)		4.83	8.35
	01/18/1990 (b)		2.49	10.69
	01/18/1990 (c)		2.55	10.63
	01/30/1991		4.24	8.94
	06/19/1991		4.28	8.67
	12/16/1991		4.68	8.27
	07/10/1992		4.21	8.74
	12/30/1992		1.96	10.99

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-5	06/08/1993	13.18	3.71	9.24
	01/05/1994		3.65	9.30
LF-6	06/14/1989	13.37	4.89	8.48
	01/10/1990 (a)		4.26	9.11
	01/18/1990 (b)		3.15	10.22
	01/18/1990 (c)		3.21	10.16
LF-7	06/14/1989	17.14	5.79	7.99
	01/10/1990 (a)		4.31	9.47
	01/18/1990 (b)		3.30	10.48
	01/18/1990 (c)		3.35	10.43
	01/30/1991		4.82	8.96
	06/19/1991		4.73	9.05
	12/16/1991		4.87	8.91
	07/10/1992		4.82	8.96
	12/30/1992		3.10	10.68
	06/08/1993		4.31	9.47
	01/05/1994		4.36	9.42
	09/08/1994		4.97	8.81
	03/29/1995		3.77	10.01
	08/09/1995		NM	NM
	04/24/1996		8.65	8.49
	07/29/1996		9.70	7.44
	12/13/1996		6.99	10.15
	04/15/1997		8.21	8.93
	09/19/1997		8.22	8.92
	12/03/1997		7.42	9.72
	12/15/1997		5.95	11.19
	01/13/1998		4.89	12.25
	01/30/1998		5.02	12.12
	02/24/1998		5.22	11.92
	04/06/1998		7.52	9.62
	07/02/1998		9.74	7.40
	07/13/1998		9.85	7.29
	09/28/1998		10.40	6.74
	10/16/1998		10.55	6.59
	01/08/1999		8.45	8.69
	04/16/1999		7.63	9.51
	06/21/1999		11.07	6.07
	07/12/1999		11.23	5.91
	10/08/1999		11.34	5.80
	01/17/2000		10.51	6.63
	04/25/2000		6.92	10.22
	05/30/2000		7.87	9.27
	06/26/2000		8.59	8.55
	08/10/2000		9.89	7.25

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-7	08/31/2000	17.14	9.87	7.27
	09/25/2000		9.83	7.31
	10/06/2000		10.14	7.00
	11/21/2000		9.14	8.00
	12/18/2000		8.40	8.74
	01/15/2001		8.29	8.85
	02/14/2001		6.57	10.57
	03/01/2001		5.51	11.63
	04/19/2001		7.30	9.84
	05/23/2001		8.75	8.39
	06/14/2001		9.45	7.69
	07/02/2001		10.10	7.04
	08/10/2001		9.69	7.45
	09/07/2001		10.11	7.03
	10/18/2001		10.04	7.10
	11/02/2001		10.15	6.99
	12/14/2001		5.00	12.14
	01/18/2002		6.72	10.42
	02/21/2002		8.19	8.95
	03/25/2002		7.26	9.88
	04/18/2002		9.34	7.80
	05/10/2002		9.17	7.97
	06/04/2002		8.67	8.47
	07/10/2002		9.05	8.09
	08/15/2002		10.71	6.43
	09/11/2002		10.01	7.13
	10/08/2002		9.86	7.28
	11/07/2002		10.12	7.02
	12/12/2002		9.64	7.50
	01/13/2003		7.23	9.91
	02/26/2003		8.01	9.13
	03/19/2003		8.42	8.72
	04/14/2003		8.74	8.40
	05/13/2003		9.50	7.64
	06/13/2003		10.39	6.75
	07/07/2003		10.56	6.58
	08/13/2003		10.69	6.45
	09/17/2003		10.57	6.57
	10/27/2003		10.62	6.52
	11/18/2003		10.05	7.09
	12/19/2003		9.18	7.96
	01/15/2004		8.46	8.68
	02/17/2004		8.31	8.83
	03/18/2004		9.39	7.75
	04/21/2004		9.79	7.35

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-7	05/18/2004	17.14	9.92	7.22
	06/10/2004		10.15	6.99
	07/13/2004		10.63	6.51
	08/12/2004		10.70	6.44
	09/16/2004		10.50	6.64
	10/12/2004		9.98	7.16
	11/17/2004		8.46	8.68
	12/15/2004		8.01	9.13
	01/24/2005		7.56	9.58
	02/15/2005		9.58	7.56
	03/15/2005		7.94	9.20
	04/25/2005		8.63	8.51
	05/20/2005		9.21	7.93
	06/21/2005		9.41	7.73
	07/20/2005		10.57	6.57
	08/19/2005		11.05	6.09
	09/16/2005		10.73	6.41
	10/21/2005		11.17	5.97
	11/18/2005		10.69	6.45
	12/16/2005		10.94	6.20
	01/20/2006		5.92	11.22
	02/22/2006		8.92	8.22
	03/30/2006		6.10	11.04
	04/27/2006		10.51	6.63
	05/18/2006		9.52	7.62
	06/22/2006		10.42	6.72
	07/20/2006		10.37	6.77
	08/17/2006		10.50	6.64
	09/14/2006		10.53	6.61
	10/19/2006		10.38	6.76
	11/21/2006		9.64	7.50
	12/21/2006		8.09	9.05
	01/18/2007		8.71	8.43
	02/06/2007		9.60	7.54
	03/08/2007		7.74	9.40
	04/12/2007		9.53	7.61
	05/10/2007		9.27	7.87
	06/07/2007		10.36	6.78
	07/19/2007		11.04	6.10
	08/09/2007		11.14	6.00
	08/17/2007		10.81	6.33
	08/24/2007		10.57	6.57
	08/30/2007		10.39	6.75
	09/06/2007		10.21	6.93
	09/14/2007		10.04	7.10

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-7	09/21/2007	17.14	9.86	7.28
	09/28/2007		9.69	7.45
	10/05/2007		9.53	7.61
	10/12/2007		9.06	8.08
	10/19/2007		8.38	8.76
	10/26/2007		8.11	9.03
	11/02/2007		8.05	9.09
	11/09/2007		7.97	9.17
	11/15/2007		7.50	9.64
	11/21/2007		7.43	9.71
	11/29/2007		7.45	9.69
	12/14/2007		7.44	9.70
	01/17/2008		7.78	9.36
	02/21/2008		7.79	9.35
	03/20/2008		9.77	7.37
	04/10/2008		10.64	6.50
	05/08/2008		10.61	6.53
	06/12/2008		10.99	6.15
	07/24/2008		11.15	5.99
	08/14/2008		11.32	5.82
	09/18/2008		11.36	5.78
	10/22/2008		11.35	5.79
	11/13/2008		9.77	7.37
	12/04/2008		10.19	6.95
	01/08/2009		8.82	8.32
	02/11/2009		9.37	7.77
	03/12/2009		6.37	10.77
	04/09/2009		8.36	8.78
	05/20/2009		8.82	8.32
	06/17/2009		10.01	7.13
	07/16/2009		10.44	6.70
	08/13/2009		10.74	6.40
	09/10/2009		10.74	6.40
	10/16/2009		8.30	8.82
	11/12/2009		10.37	6.77
	12/03/2009		10.30	6.84
	01/14/2010		9.74	7.40
	02/18/2010		7.13	10.01
	03/25/2010		8.39	8.75
	04/23/2010		7.98	9.16
	05/21/2010		9.34	7.80
	06/10/2010		9.30	7.84
	07/23/2010		10.39	6.75
	08/12/2010		10.09	7.05
	09/10/2010		10.94	6.20

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-7	10/15/2010	17.14	10.98	6.15
	11/04/2010		10.39	6.75
	12/03/2010		8.74	8.40
	01/28/2011		7.98	9.16
	02/10/2011		8.36	8.78
	03/31/2011		5.91	11.23
	04/19/2011		8.20	8.94
LF-8	01/10/1990 (a)	15.61	7.08	8.09
	01/18/1990 (b)		6.22	8.95
	01/18/1990 (c)		6.27	8.90
	01/30/1991		7.32	8.13
	06/19/1991		7.22	8.23
	12/16/1991		7.18	8.27
	07/10/1992		7.14	8.31
	12/30/1992		5.85	9.60
	06/08/1993		6.57	8.88
	01/05/1994		6.72	8.73
	09/08/1994		7.34	8.11
	03/29/1995		4.88	10.57
	08/09/1995		NM	NM
	04/24/1996		7.14	8.47
	07/29/1996		8.21	7.40
	12/13/1996		5.12	10.49
	04/15/1997		7.21	8.40
	09/19/1997		7.25	8.36
	12/03/1997		5.65	9.96
	12/15/1997		4.56	11.05
	01/13/1998		3.51	12.10
	01/30/1998		3.63	11.98
	02/24/1998		3.68	11.93
	04/06/1998		5.91	9.70
	07/02/1998		7.97	7.64
	07/13/1998		8.18	7.43
	09/28/1998		8.59	7.02
	10/16/1998		8.78	6.83
	01/08/1999		6.71	8.90
	04/16/1999		5.95	9.66
	06/21/1999		8.46	7.15
	07/12/1999		8.79	6.82
	10/08/1999		9.24	6.37
	01/17/2000		8.09	7.52
	04/25/2000		5.72	9.89
	05/30/2000		6.38	9.23
	06/26/2000		NM	NM
	08/10/2000		7.76	7.85

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-8	10/06/2000	15.61	8.08	7.53
	01/15/2001		6.54	9.07
	04/19/2001		7.55	8.06
	07/02/2001		7.98	7.63
	09/07/2001		NM	NM
	10/18/2001		8.24	7.37
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		5.60	10.01
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		6.98	8.63
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		7.29	8.32
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		7.90	7.71
	01/13/2003		6.90	8.71
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		6.53	9.08
	07/07/2003		8.34	7.27
	10/27/2003		NM	NM
	11/18/2003		7.91	7.70
	01/15/2004		6.51	9.10
	04/21/2004		7.36	8.25
	07/13/2004		8.37	7.24
	10/12/2004		8.30	7.31
	01/24/2005		6.16	9.45
	04/25/2005		6.79	8.82
	07/20/2005		8.09	7.52
	10/21/2005		8.94	6.67
	01/20/2006		5.20	10.41
	04/27/2006		6.38	9.23
	07/20/2006		8.20	7.41
	10/19/2006		8.37	7.24
	01/18/2007		6.78	8.83
	04/12/2007		6.98	8.63
	07/19/2007		8.44	7.17
	08/17/2007		8.68	6.93
	08/24/2007		8.67	6.94
	08/30/2007		8.64	6.97
	09/06/2007		8.56	7.05
	09/14/2007		8.51	7.10

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-8	09/21/2007	15.61	8.40	7.21
	09/28/2007		8.25	7.36
	10/05/2007		8.20	7.41
	10/12/2007		7.47	8.14
	10/19/2007		7.00	8.61
	10/26/2007		6.83	8.78
	11/02/2007		6.81	8.80
	11/09/2007		6.80	8.81
	11/15/2007		6.32	9.29
	11/21/2007		6.35	9.26
	11/29/2007		6.35	9.26
	01/17/2008		6.20	9.41
	04/10/2008		7.83	7.78
	07/24/2008		8.84	6.77
	10/22/2008		9.06	6.55
	01/08/2009		7.16	8.45
	04/09/2009		6.50	9.11
	07/16/2009		8.14	7.47
	10/16/2009		6.50	9.09
	01/14/2010		7.22	8.39
	04/23/2010		6.42	9.19
	07/23/2010		8.04	7.57
	10/15/2010		8.72	6.88
	01/28/2011		6.39	9.22
	04/19/2011		6.53	9.08
LF-9	01/10/1990 (a)	13.14	4.81	8.33
	01/18/1990 (b)		3.24	9.90
	01/18/1990 (c)		3.29	9.85
	01/30/1991		5.39	7.75
	06/19/1991		5.01	8.13
	12/16/1991		5.46	7.68
	07/10/1992		5.27	7.87
	12/30/1992		3.65	9.49
	06/08/1993		4.88	8.26
	01/05/1994		NM	NM
LF-B1	01/10/1990 (a)	19.82	10.68	9.14
	01/18/1990 (b)		10.24	9.58
	01/18/1990 (c)		10.27	9.55
	01/30/1991		10.77	9.05
	06/19/1991		10.38	9.43
	12/16/1991		10.32	9.49
	07/10/1992		10.09	9.72
	12/30/1992		9.54	10.27
	06/08/1993		9.68	10.13
	01/05/1994		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-B2	01/10/1990 (a)	13.93	4.25	9.68
	01/18/1990 (b)		3.65	10.28
	01/18/1990 (c)		3.66	10.27
	01/30/1991		3.25	10.68
	06/19/1991		NM	NM
	12/16/1991		3.27	9.15
	07/10/1992		3.20	9.22
	12/30/1992		NM	NM
	06/08/1993		2.96	9.46
	01/05/1994		3.05	9.37
LF-B3	01/10/1990 (a)	13.00	3.30	9.76
	01/18/1990 (b)		2.79	10.27
	01/18/1990 (c)		2.80	10.26
	01/30/1991		3.88	9.18
	06/19/1991		3.81	9.24
	12/16/1991		3.89	9.16
	07/10/1992		3.81	9.24
	12/30/1992		3.03	10.02
	06/08/1993		3.56	9.49
	01/05/1994		3.68	9.37
	04/24/1996		3.44	9.56
	07/29/1996		4.12	8.88
	12/13/1996		2.70	10.30
	04/15/1997		3.95	9.05
	09/19/1997		4.08	8.92
	12/03/1997		3.10	9.90
	12/15/1997		NM	NM
	01/13/1998		2.54	10.46
	01/30/1998		2.62	10.38
	02/24/1998		1.70	11.30
	04/06/1998		2.76	10.24
	07/02/1998		3.86	9.14
	07/13/1998		3.95	9.05
	09/28/1998		4.21	8.79
	10/16/1998		4.22	8.78
	01/08/1999		4.01	8.99
	04/16/1999		3.24	9.76
	06/21/1999		4.41	8.59
	07/12/1999		4.40	8.60
	10/08/1999		4.59	8.41
	01/17/2000		4.26	8.74
	04/25/2000		3.53	9.47
	05/30/2000		3.85	9.15
	06/26/2000		NM	NM
	08/10/2000		4.47	8.53

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-B3	10/06/2000	13.00	4.45	8.55
	01/15/2001		3.56	9.44
	04/19/2001		3.74	9.26
	07/02/2001		4.17	8.83
	09/07/2001		NM	NM
	10/18/2001		4.30	8.70
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		3.29	9.71
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		4.08	8.92
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		4.16	8.84
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		6.48	6.52
	01/13/2003		3.13	9.87
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		3.50	9.50
	07/07/2003		4.06	8.94
	10/27/2003		NM	NM
	11/18/2003		4.02	8.98
	01/15/2004		3.00	10.00
	04/21/2004		3.75	9.25
	07/13/2004		4.07	8.93
	10/12/2004		4.05	8.95
	01/24/2005		3.24	9.76
	04/25/2005		3.14	9.86
	07/20/2005		3.95	9.05
	10/21/2005		4.14	8.86
	01/20/2006		2.38	10.62
	04/27/2006		2.92	10.08
	07/20/2006		3.75	9.25
	10/19/2006		3.69	9.31
	01/18/2007		3.44	9.56
	04/12/2007		2.23	10.77
	07/19/2007		3.90	9.10
	10/12/2007		NM	NM
	01/17/2008		2.91	10.09
	04/10/2008		3.86	9.14
	07/24/2008		4.00	9.00
	10/22/2008		4.01	8.99

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-B3	01/08/2009	13.00	3.12	9.88
	04/09/2009		3.16	9.84
	07/16/2009		3.77	9.23
	10/16/2009		3.01	9.97
	01/14/2010		3.54	9.46
	04/23/2010		2.63	10.37
	07/23/2010		3.73	9.27
	10/15/2010		4.00	8.99
	01/28/2011		3.28	9.72
	04/19/2011		3.20	9.80
LF-B4	01/30/1991	17.25	6.88	10.36
	06/19/1991		6.78	10.46
	12/16/1991		6.85	10.39
	07/10/1992		6.79	10.45
	12/30/1992		6.17	11.07
	06/08/1993		6.53	10.71
	01/05/1994		6.62	10.62
	04/24/1996		6.39	10.86
	07/29/1996		6.97	10.28
	12/13/1996		5.64	11.61
	04/15/1997		6.68	10.57
	09/19/1997		6.75	10.50
	12/03/1997		5.90	11.35
	12/15/1997		5.89	11.36
	01/13/1998		5.45	11.80
	01/30/1998		5.69	11.56
	02/24/1998		5.26	11.99
	04/06/1998		5.99	11.26
	07/02/1998		6.61	10.64
	07/13/1998		6.67	10.58
	09/28/1998		6.85	10.40
	10/16/1998		6.99	10.26
	01/08/1999		6.85	10.40
	04/16/1999		6.35	10.90
	06/21/1999		7.18	10.07
	07/12/1999		7.22	10.03
	10/08/1999		7.11	10.14
	01/17/2000		6.75	10.50
	04/25/2000		6.32	10.93
	05/30/2000		6.60	10.65
	06/26/2000		NM	NM
	08/10/2000		6.98	10.27
	10/06/2000		7.01	10.24
	01/15/2001		6.30	10.95
	04/19/2001		6.52	10.73

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-B4	07/02/2001	17.25	6.75	10.50
	09/07/2001		NM	NM
	10/18/2001		6.74	10.51
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		6.10	11.15
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		6.53	10.72
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		6.73	10.52
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		6.64	10.61
	01/13/2003		5.72	11.53
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		5.90	11.35
	07/07/2003		6.57	10.68
	10/27/2003		NM	NM
	11/18/2003		6.50	10.75
	01/15/2004		5.96	11.29
	04/21/2004		6.36	10.89
	07/13/2004		6.61	10.64
	10/12/2004		6.59	10.66
	01/24/2005		6.01	11.24
	04/25/2005		6.09	11.16
	07/20/2005		6.79	10.46
	10/21/2005		6.83	10.42
	01/20/2006		5.75	11.50
	04/27/2006		5.91	11.34
	07/20/2006		6.41	10.84
	10/19/2006		6.44	10.81
	01/18/2007		6.27	10.98
	04/12/2007		6.29	10.96
	07/19/2007		6.53	10.72
	10/12/2007		6.23	11.02
	01/17/2008		5.92	11.33
	04/10/2008		6.57	10.68
	07/24/2008		6.86	10.39
	10/22/2008		6.82	10.43
	01/08/2009		6.08	11.17
	04/09/2009		6.08	11.17
	07/16/2009		6.54	10.71

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-B4	10/16/2009	17.25	5.84	11.39
	01/14/2010		6.14	11.11
	04/23/2010		5.76	11.49
	07/23/2010		6.40	10.85
	10/15/2010		6.68	10.56
	01/28/2011		6.10	11.15
	04/19/2011		6.02	11.23
LF-B5	06/14/1989	20.99	35.40	-14.41
	04/24/1996		10.35	10.64
	07/29/1996		11.03	9.96
	12/13/1996		9.25	11.74
	04/15/1997		10.68	10.31
	09/19/1997		10.78	10.21
	12/03/1997		9.94	11.05
	12/15/1997		2.88	18.11
	01/13/1998		9.33	11.66
	01/30/1998		9.48	11.51
	02/24/1998		9.07	11.92
	04/06/1998		9.93	11.06
	07/02/1998		10.67	10.32
	07/13/1998		10.71	10.28
	09/28/1998		10.95	10.04
	10/16/1998		11.07	9.92
	01/08/1999		11.31	9.68
	04/16/1999		10.78	10.21
	06/21/1999		11.54	9.45
	07/12/1999		11.36	9.63
	10/08/1999		11.63	9.36
	01/17/2000		11.23	9.76
	04/25/2000		10.34	10.65
	05/30/2000		11.22	9.77
	06/26/2000		NM	NM
	08/10/2000		11.22	9.77
	10/06/2000		11.50	9.49
	01/15/2001		10.81	10.18
	04/19/2001		10.94	10.05
	07/02/2001		10.93	10.06
	09/07/2001		NM	NM
	10/18/2001		11.22	9.77
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		9.93	11.06
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		10.40	10.59

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-B5	05/10/2002	20.99	NM	NM
	06/04/2002		NM	NM
	07/10/2002		10.78	10.21
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		10.52	10.47
	01/13/2003		9.76	11.23
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		9.80	11.19
	07/07/2003		10.62	10.37
	10/27/2003		NM	NM
	11/18/2003		10.67	10.32
	01/15/2004		10.05	10.94
	04/21/2004		10.50	10.49
	07/13/2004		10.64	10.35
	10/12/2004		10.75	10.24
	01/24/2005		10.05	10.94
	04/25/2005		10.14	10.85
	07/20/2005		10.70	10.29
	10/21/2005		11.02	9.97
	01/20/2006		9.72	11.27
	04/27/2006		9.61	11.38
	07/20/2006		11.50	9.49
	10/19/2006		10.30	10.69
	01/18/2007		10.18	10.81
	04/12/2007		10.12	10.87
	07/19/2007		10.46	10.53
	10/12/2007		9.88	11.11
	01/17/2008		9.79	11.20
	04/10/2008		10.49	10.50
	07/24/2008		10.72	10.27
	10/22/2008		10.72	10.27
	01/08/2009		10.00	10.99
	04/17/2009		9.91	11.08
	07/16/2009		10.79	10.20
	10/16/2009		9.72	11.25
	01/14/2010		10.00	10.99
	04/23/2010		9.57	11.42
	07/23/2010		10.20	10.79
	10/15/2010		10.55	10.43
	01/28/2011		33.04	-12.05
	04/19/2011		NM	NM
LF-B6	04/24/1996	14.69	5.12	9.57
	07/29/1996		5.81	8.88

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-B6	12/13/1996	14.69	4.33	10.36
	04/15/1997		5.61	9.08
	09/19/1997		5.75	8.94
	12/03/1997		4.82	9.87
	12/15/1997		4.71	9.98
	01/13/1998		4.25	10.44
	01/30/1998		5.41	9.28
	02/24/1998		3.83	10.86
	04/06/1998		4.67	10.02
	07/02/1998		5.54	9.15
	07/13/1998		5.61	9.08
	09/28/1998		5.87	8.82
	10/16/1998		5.89	8.80
	01/08/1999		5.65	9.04
	04/16/1999		4.97	9.72
	06/21/1999		6.00	8.69
	07/12/1999		6.10	8.59
	10/08/1999		6.27	8.42
	01/17/2000		6.03	8.66
	04/25/2000		5.15	9.54
	05/30/2000		5.51	9.18
	06/26/2000		NM	NM
	08/10/2000		6.10	8.59
	10/06/2000		6.09	8.60
	01/15/2001		5.34	9.35
	04/19/2001		5.44	9.25
	07/02/2001		5.89	8.80
	09/07/2001		NM	NM
	10/18/2001		5.92	8.77
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		4.85	9.84
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		5.75	8.94
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		5.87	8.82
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		5.86	8.83
	01/13/2003		4.69	10.00
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		5.18	9.51

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-B6	07/07/2003	14.69	5.72	8.97
	10/27/2003		NM	NM
	11/18/2003		5.74	8.95
	01/15/2004		4.98	9.71
	04/21/2004		5.55	9.14
	07/13/2004		5.77	8.92
	10/12/2004		5.77	8.92
	01/24/2005		4.88	9.81
	04/25/2005		5.12	9.57
	07/20/2005		5.74	8.95
	10/21/2005		6.01	8.68
	01/20/2006		4.55	10.14
	04/27/2006		4.70	9.99
	07/20/2006		5.47	9.22
	10/19/2006		5.46	9.23
	01/18/2007		5.28	9.41
	04/12/2007		5.36	9.33
	07/19/2007		5.60	9.09
	10/12/2007		5.05	9.64
	01/17/2008		4.65	10.04
	04/10/2008		5.57	9.12
	07/24/2008		5.61	9.08
	10/22/2008		5.66	9.03
	01/08/2009		4.92	9.77
	04/09/2009		4.86	9.83
	07/16/2009		5.42	9.27
	10/16/2009		4.68	9.99
	01/14/2010		5.18	9.51
	04/23/2010		4.58	10.11
	07/23/2010		5.34	9.35
	10/15/2010		5.64	9.04
	01/28/2011		4.93	9.76
	04/19/2011		4.82	9.87
LF-PZ1	12/15/1997	17.62	6.13	11.49
	01/13/1998		4.94	12.68
	01/30/1998		5.20	12.42
	02/24/1998		4.77	12.85
	04/06/1998		6.67	10.95
	07/02/1998		8.62	9.00
	07/13/1998		9.05	8.57
	09/28/1998		9.20	8.42
	10/16/1998		9.33	8.29
	01/08/1999		9.04	8.58
	04/16/1999		7.93	9.69
	06/21/1999		10.34	7.28

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ1	07/12/1999	17.62	10.51	7.11
	10/08/1999		10.46	7.16
	01/17/2000		8.75	8.87
	04/25/2000		7.20	10.42
	05/30/2000		8.21	9.41
	06/26/2000		NM	NM
	08/10/2000		9.54	8.08
	10/06/2000		9.17	8.45
	01/15/2001		7.79	9.83
	04/19/2001		7.32	10.30
	07/02/2001		9.51	8.11
	09/07/2001		NM	NM
	10/18/2001		8.80	8.82
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		6.80	10.82
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		9.61	8.01
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		8.07	9.55
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		8.32	9.30
	01/13/2003		6.82	10.80
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		6.70	10.92
	07/07/2003		8.48	9.14
	10/27/2003		NM	NM
	11/18/2003		8.57	9.05
	01/15/2004		7.60	10.02
	04/21/2004		8.63	8.99
	07/13/2004		9.55	8.07
	10/12/2004		8.45	9.17
	01/25/2005		7.45	10.17
	04/25/2005		7.52	10.10
	07/20/2005		8.28	9.34
	10/21/2005		9.76	7.86
	01/20/2006		5.45	12.17
	04/27/2006		8.23	9.39
	07/20/2006		8.75	8.87
	10/19/2006		8.12	9.50
	01/18/2007		7.27	10.35

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ1	04/12/2007	17.62	8.01	9.61
	07/19/2007		9.18	8.44
	10/05/2007		7.67	9.95
	10/12/2007		5.59	12.03
	10/26/2007		6.85	10.77
	11/02/2007		6.93	10.69
	01/17/2008		6.87	10.75
	04/10/2008		8.52	9.10
	07/24/2008		9.70	7.92
	10/22/2008		9.04	8.58
	01/08/2009		7.32	10.30
	04/09/2009		7.45	10.17
	07/16/2009		8.75	8.87
	10/16/2009		6.77	10.83
	01/14/2010		7.04	10.58
	04/23/2010		6.94	10.68
	07/23/2010		8.58	9.04
	10/15/2010		9.03	8.58
	01/28/2011		6.84	10.78
	04/19/2011		6.81	10.81
LF-PZ10	12/15/1997	14.96	3.49	11.47
	01/13/1998		2.33	12.63
	01/30/1998		2.69	12.27
	02/24/1998		2.31	12.65
	04/06/1998		4.27	10.69
	07/02/1998		6.11	8.85
	07/13/1998		6.29	8.67
	09/28/1998		6.52	8.44
	10/16/1998		6.66	8.30
	01/08/1999		6.22	8.74
	04/16/1999		5.34	9.62
	06/21/1999		7.72	7.24
	07/12/1999		7.90	7.06
	10/08/1999		7.95	7.01
	01/17/2000		6.40	8.56
	04/25/2000		4.49	10.47
	05/30/2000		5.81	9.15
	06/26/2000		NM	NM
	08/10/2000		7.76	7.20
	10/06/2000		6.78	8.18
	01/15/2001		5.15	9.81
	04/19/2001		5.20	9.76
	07/02/2001		6.97	7.99
	09/07/2001		NM	NM
	10/18/2001		6.20	8.76

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ10	11/02/2001	14.96	NM	NM
	12/14/2001		NM	NM
	01/18/2002		4.40	10.56
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		6.65	8.31
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		6.36	8.60
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		5.91	9.05
	01/13/2003		4.29	10.67
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		4.15	10.81
	07/07/2003		7.10	7.86
	10/27/2003		NM	NM
	11/18/2003		5.82	9.14
	01/15/2004		5.35	9.61
	04/21/2004		6.20	8.76
	07/13/2004		7.09	7.87
	10/12/2004		5.92	9.04
	01/25/2005		4.64	10.32
	04/25/2005		5.18	9.78
	07/20/2005		6.82	8.14
	10/21/2005		7.14	7.82
	01/20/2006		2.88	12.08
	04/27/2006		5.22	9.74
	07/20/2006		6.35	8.61
	10/19/2006		5.64	9.32
	01/18/2007		5.32	9.64
	04/12/2007		5.78	9.18
	07/19/2007		6.75	8.21
	10/05/2007		5.23	9.73
	10/12/2007		3.94	11.02
	10/26/2007		NM	NM
	11/02/2007		4.49	10.47
	01/17/2008		4.42	10.54
	04/10/2008		6.21	8.75
	07/24/2008		7.36	7.60
	10/22/2008		6.80	8.16
	01/08/2009		4.86	10.10
	04/09/2009		5.06	9.90
	07/16/2009		6.40	8.56

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ10	10/16/2009	14.96	4.58	10.36
	01/14/2010		5.23	9.73
	04/23/2010		4.37	10.59
	07/23/2010		6.03	8.93
	10/15/2010		6.74	8.21
	01/28/2011		4.63	10.33
	04/19/2011		5.00	9.96
LF-PZ11	12/15/1997	15.49	5.92	9.57
	01/13/1998		3.77	11.72
	01/30/1998		4.41	11.08
	02/24/1998		4.04	11.45
	04/06/1998		5.15	10.34
	07/02/1998		5.85	9.64
	07/13/1998		5.88	9.61
	09/28/1998		6.14	9.35
	10/16/1998		6.22	9.27
	01/08/1999		5.81	9.68
	04/16/1999		4.78	10.71
	06/21/1999		6.19	9.30
	07/12/1999		6.21	9.28
	10/08/1999		6.15	9.34
	01/17/2000		5.66	9.83
	04/25/2000		5.25	10.24
	05/30/2000		5.70	9.79
	06/26/2000		NM	NM
	08/10/2000		6.15	9.34
	10/06/2000		6.09	9.40
	01/15/2001		4.97	10.52
	04/19/2001		5.34	10.15
	07/02/2001		5.86	9.63
	09/07/2001		NM	NM
	10/18/2001		5.83	9.66
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		4.80	10.69
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		5.36	10.13
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		5.81	9.68
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		5.83	9.66
	01/13/2003		4.32	11.17

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ11	02/26/2003	15.49	NM	NM
	03/19/2003		NM	NM
	04/14/2003		4.78	10.71
	07/07/2003		5.75	9.74
	10/27/2003		NM	NM
	11/18/2003		5.53	9.96
	01/15/2004		5.10	10.39
	04/21/2004		5.45	10.04
	07/13/2004		5.76	9.73
	10/12/2004		5.80	9.69
	01/25/2005		4.72	10.77
	04/25/2005		5.25	10.24
	07/20/2005		5.68	9.81
	10/21/2005		5.96	9.53
	01/20/2006		4.06	11.43
	04/27/2006		4.92	10.57
	07/20/2006		5.63	9.86
	10/19/2006		5.68	9.81
	01/18/2007		5.28	10.21
	04/12/2007		5.40	10.09
	07/19/2007		5.70	9.79
	08/17/2007		5.77	9.72
	08/24/2007		5.74	9.75
	08/30/2007		5.78	9.71
	09/06/2007		5.76	9.73
	09/14/2007		5.65	9.84
	09/21/2007		5.53	9.96
	09/28/2007		5.56	9.93
	10/05/2007		5.64	9.85
	10/12/2007		4.60	10.89
	10/19/2007		4.69	10.80
	10/26/2007		5.04	10.45
	11/02/2007		5.28	10.21
	11/09/2007		5.41	10.08
	11/15/2007		4.61	10.88
	11/21/2007		4.99	10.50
	11/29/2007		5.33	10.16
	01/17/2008		4.69	10.80
	04/10/2008		5.61	9.88
	07/24/2008		6.15	9.34
	10/22/2008		5.93	9.56
	01/08/2009		4.84	10.65
	04/09/2009		4.98	10.51
	07/16/2009		5.75	9.74
	10/16/2009		4.10	11.37

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ11	01/14/2010	15.49	4.98	10.51
	04/23/2010		4.42	11.07
	07/23/2010		5.69	9.80
	10/15/2010		5.85	9.63
	01/28/2011		4.94	10.55
	04/19/2011		5.01	10.48
LF-PZ12	12/15/1997	13.71	4.38	9.33
	01/13/1998		3.67	10.04
	01/30/1998		4.04	9.67
	02/24/1998		3.68	10.03
	04/07/1998		4.61	9.10
	07/02/1998		5.21	8.50
	07/13/1998		5.23	8.48
	09/28/1998		5.38	8.33
	10/16/1998		5.38	8.33
	01/08/1999		4.89	8.82
	04/16/1999		3.64	10.07
	06/21/1999		5.37	8.34
	07/12/1999		5.36	8.35
	10/08/1999		5.28	8.43
	01/17/2000		5.06	8.65
	02/11/2000		3.45	10.26
	04/25/2000		4.33	9.38
	05/30/2000		4.86	8.85
	06/26/2000		NM	NM
	08/10/2000		5.31	8.40
	10/06/2000		5.02	8.69
	01/15/2001		3.58	10.13
	04/19/2001		4.54	9.17
	07/02/2001		5.01	8.70
	09/07/2001		NM	NM
	10/18/2001		4.91	8.80
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		4.00	9.71
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		4.64	9.07
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		4.86	8.85
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		4.92	8.79
	01/13/2003		2.01	11.70

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ12	02/26/2003	13.71	NM	NM
	03/19/2003		NM	NM
	04/14/2003		3.40	10.31
	07/07/2003		4.79	8.92
	10/27/2003		NM	NM
	11/18/2003		4.55	9.16
	01/15/2004		3.90	9.81
	04/21/2004		4.51	9.20
	07/13/2004		4.82	8.89
	10/12/2004		4.84	8.87
	01/25/2005		4.28	9.43
	04/25/2005		4.30	9.41
	07/20/2005		4.73	8.98
	10/21/2005		4.97	8.74
	01/20/2006		2.98	10.73
	04/27/2006		NM	NM
	07/20/2006		4.67	9.04
	10/19/2006		4.70	9.01
	01/18/2007		4.33	9.38
	04/12/2007		4.42	9.29
	07/19/2007		4.65	9.06
	08/17/2007		4.71	9.00
	08/24/2007		4.69	9.02
	08/30/2007		4.70	9.01
	09/06/2007		4.66	9.05
	09/14/2007		4.68	9.03
	09/21/2007		4.52	9.19
	09/28/2007		4.47	9.24
	10/05/2007		4.51	9.20
	10/12/2007		NM	NM
	10/19/2007		3.41	10.30
	10/26/2007		3.88	9.83
	11/02/2007		4.14	9.57
	11/09/2007		4.26	9.45
	11/15/2007		3.35	10.36
	11/21/2007		3.91	9.80
	11/29/2007		4.21	9.50
	01/17/2008		4.16	9.55
	04/10/2008		4.17	9.54
	07/24/2008		5.22	8.49
	10/22/2008		4.76	8.95
	01/08/2009		3.71	10.00
	04/09/2009		3.96	9.75
	07/16/2009		4.65	9.06
	10/16/2009		2.69	11.00

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ12	01/14/2010	13.71	4.26	9.45
	04/23/2010		3.09	10.62
	07/23/2010		4.58	9.13
	10/15/2010		4.76	8.94
	01/28/2011		3.87	9.84
	04/19/2011		3.85	9.86
LF-PZ13	12/15/1997	13.63	2.78	10.85
	01/13/1998		1.78	11.85
	01/30/1998		2.05	11.58
	02/24/1998		2.01	11.62
	04/07/1998		4.03	9.60
	07/02/1998		5.76	7.87
	07/13/1998		5.87	7.76
	09/28/1998		6.41	7.22
	10/16/1998		6.55	7.08
	01/08/1999		4.80	8.83
	04/16/1999		3.80	9.83
	06/21/1999		7.45	6.18
	07/12/1999		7.56	6.07
	10/08/1999		7.60	6.03
	02/11/2000		4.71	8.92
	04/25/2000		3.54	10.09
	05/30/2000		4.40	9.23
	06/26/2000		NM	NM
	08/10/2000		6.42	7.21
	10/06/2000		6.52	7.11
	01/15/2001		4.89	8.74
	04/19/2001		4.02	9.61
	07/02/2001		6.70	6.93
	09/07/2001		NM	NM
	10/18/2001		6.40	7.23
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		3.35	10.28
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		6.31	7.32
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		5.51	8.12
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		8.05	5.58
	01/13/2003		3.65	9.98
	02/26/2003		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ13	03/19/2003	13.63	NM	NM
	04/14/2003		4.88	8.75
	07/07/2003		6.92	6.71
	10/27/2003		NM	NM
	11/18/2003		6.62	7.01
	01/15/2004		5.21	8.42
	04/21/2004		6.31	7.32
	07/13/2004		6.84	6.79
	10/12/2004		6.21	7.42
	01/25/2005		3.95	9.68
	04/25/2005		5.29	8.34
	07/20/2005		7.00	6.63
	10/21/2005		7.26	6.37
	01/20/2006		2.38	11.25
	04/27/2006		NM	NM
	07/20/2006		6.41	7.22
	10/19/2006		6.39	7.24
	01/18/2007		5.30	8.33
	04/12/2007		5.96	7.67
	07/19/2007		7.08	6.55
	08/17/2007		6.90	6.73
	08/24/2007		6.57	7.06
	08/30/2007		6.45	7.18
	09/06/2007		6.26	7.37
	09/14/2007		6.12	7.51
	09/21/2007		5.89	7.74
	09/28/2007		5.72	7.91
	10/05/2007		5.58	8.05
	10/12/2007		NM	NM
	10/19/2007		4.41	9.22
	10/26/2007		4.31	9.32
	11/02/2007		4.30	9.33
	11/09/2007		4.30	9.33
	11/15/2007		3.78	9.85
	11/21/2007		3.79	9.84
	11/29/2007		3.87	9.76
	01/17/2008		4.18	9.45
	04/10/2008		6.72	6.91
	07/24/2008		7.29	6.34
	10/22/2008		7.28	6.35
	01/08/2009		4.89	8.74
	04/09/2009		4.86	8.77
	07/16/2009		6.63	7.00
	10/16/2009		4.67	8.94
	01/14/2010		5.81	7.82

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ13	04/23/2010	13.63	4.57	9.06
	07/23/2010		6.59	7.04
	10/15/2010		7.14	6.48
	01/28/2011		4.30	9.33
	04/19/2011		4.58	9.05
LF-PZ14	12/15/1997	12.91	2.05	10.86
	01/13/1998		1.02	11.89
	01/30/1998		1.23	11.68
	02/24/1998		1.35	11.56
	04/06/1998		3.46	9.45
	07/02/1998		5.20	7.71
	07/13/1998		5.29	7.62
	09/28/1998		5.86	7.05
	10/16/1998		6.01	6.90
	01/08/1999		4.09	8.82
	04/16/1999		3.19	9.72
	06/21/1999		7.07	5.84
	07/12/1999		7.07	5.84
	10/08/1999		7.15	5.76
	01/17/2000		6.35	6.56
	04/25/2000		2.73	10.18
	05/30/2000		3.72	9.19
	06/26/2000		NM	NM
	08/10/2000		5.80	7.11
	10/06/2000		5.99	6.92
	01/15/2001		4.28	8.63
	04/19/2001		3.25	9.66
	07/02/2001		6.12	6.79
	09/07/2001		NM	NM
	10/18/2001		5.87	7.04
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		2.85	10.06
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		5.90	7.01
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		4.85	8.06
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		5.51	7.40
	01/13/2003		3.01	9.90
	02/26/2003		NM	NM
	03/19/2003		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ14	04/14/2003	12.91	5.00	7.91
	07/07/2003		6.44	6.47
	10/27/2003		NM	NM
	11/18/2003		6.20	6.71
	01/15/2004		4.82	8.09
	04/21/2004		5.91	7.00
	07/13/2004		6.34	6.57
	10/12/2004		5.65	7.26
	01/25/2005		3.61	9.30
	04/25/2005		4.83	8.08
	07/20/2005		6.68	6.23
	10/21/2005		6.81	6.10
	01/23/2006		1.85	11.06
	04/27/2006		5.02	7.89
	07/20/2006		5.93	6.98
	10/19/2006		5.98	6.93
	01/18/2007		4.92	7.99
	04/12/2007		5.79	7.12
	07/19/2007		6.71	6.20
	10/12/2007		NM	NM
	01/17/2008		3.16	9.75
	04/10/2008		6.47	6.44
	07/24/2008		6.82	6.09
	10/22/2008		6.88	6.03
	01/08/2009		4.35	8.56
	04/09/2009		4.38	8.53
	07/16/2009		6.23	6.68
	10/16/2009		4.30	8.59
	01/14/2010		5.48	7.43
	04/23/2010		4.14	8.77
	07/23/2010		6.24	6.67
	10/15/2010		6.74	6.16
	01/28/2011		3.79	9.12
	04/19/2011		4.09	8.82
LF-PZ15	12/15/1997	17.03	5.84	11.19
	01/13/1998		4.81	12.22
	01/30/1998		4.91	12.12
	02/24/1998		5.09	11.94
	04/06/1998		7.25	9.78
	07/02/1998		9.37	7.66
	07/13/1998		9.57	7.46
	09/28/1998		10.00	7.03
	10/16/1998		10.17	6.86
	01/08/1999		8.15	8.88
	04/16/1999		7.30	9.73

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ15	06/21/1999	17.03	9.87	7.16
	07/12/1999		10.19	6.84
	10/08/1999		10.64	6.39
	01/17/2000		9.47	7.56
	04/25/2000		6.92	10.11
	05/30/2000		7.72	9.31
	06/26/2000		NM	NM
	08/10/2000		9.15	7.88
	10/06/2000		9.41	7.62
	01/15/2001		7.91	9.12
	04/19/2001		7.24	9.79
	07/02/2001		9.35	7.68
	09/07/2001		NM	NM
	10/18/2001		9.61	7.42
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		6.63	10.40
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		8.36	8.67
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		8.63	8.40
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		9.35	7.68
	01/13/2003		7.20	9.83
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		7.80	9.23
	07/07/2003		9.75	7.28
	10/27/2003		NM	NM
	11/18/2003		9.25	7.78
	01/15/2004		7.87	9.16
	04/21/2004		8.72	8.31
	07/13/2004		9.79	7.24
	10/12/2004		9.70	7.33
	01/25/2005		7.37	9.66
	04/25/2005		8.11	8.92
	07/20/2005		9.55	7.48
	10/21/2005		10.35	6.68
	01/20/2006		5.90	11.13
	04/27/2006		7.63	9.40
	07/20/2006		9.61	7.42
	10/19/2006		9.75	7.28

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ15	01/18/2007	17.03	8.14	8.89
	04/12/2007		8.38	8.65
	07/19/2007		9.84	7.19
	10/12/2007		8.71	8.32
	01/17/2008		7.42	9.61
	04/10/2008		9.31	7.72
	07/24/2008		10.25	6.78
	10/22/2008		10.44	6.59
	01/08/2009		8.38	8.65
	04/09/2009		7.74	9.29
	07/16/2009		9.52	7.51
	10/16/2009		7.90	9.11
	01/14/2010		8.69	8.34
	04/23/2010		7.70	9.33
	07/23/2010		9.44	7.59
	10/15/2010		10.10	6.92
	01/28/2011		7.65	9.38
	04/19/2011		7.82	9.21
LF-PZ16	12/15/1997	13.73	2.52	11.21
	01/13/1998		1.35	12.38
	01/30/1998		1.61	12.12
	02/24/1998		2.41	11.32
	04/06/1998		3.99	9.74
	07/02/1998		6.55	7.18
	07/13/1998		6.50	7.23
	09/28/1998		7.33	6.40
	10/16/1998		7.46	6.27
	01/08/1999		5.10	8.63
	04/16/1999		4.09	9.64
	06/21/1999		7.90	5.83
	07/12/1999		8.28	5.45
	10/08/1999		8.28	5.45
	01/17/2000		7.20	6.53
	04/25/2000		3.44	10.29
	05/30/2000		4.38	9.35
	06/26/2000		NM	NM
	08/10/2000		6.90	6.83
	10/06/2000		7.20	6.53
	01/15/2001		5.02	8.71
	04/19/2001		3.94	9.79
	07/02/2001		7.34	6.39
	09/07/2001		NM	NM
	10/18/2001		7.02	6.71
	11/02/2001		NM	NM
	12/14/2001		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ16	01/18/2002	13.73	3.90	9.83
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		6.75	6.98
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		5.76	7.97
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		6.58	7.15
	01/13/2003		3.81	9.92
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		5.31	8.42
	07/07/2003		7.53	6.20
	10/27/2003		NM	NM
	11/18/2003		7.00	6.73
	01/15/2004		5.55	8.18
	04/21/2004		6.63	7.10
	07/13/2004		7.32	6.41
	10/12/2004		6.77	6.96
	01/25/2005		4.50	9.23
	04/25/2005		5.47	8.26
	07/20/2005		7.52	6.21
	10/21/2005		7.95	5.78
	01/20/2006		2.80	10.93
	04/27/2006		10.00	3.73
	07/20/2006		6.85	6.88
	10/19/2006		7.03	6.70
	01/18/2007		5.44	8.29
	04/12/2007		6.31	7.42
	07/19/2007		7.96	5.77
	10/12/2007		5.25	8.48
	01/17/2008		4.86	8.87
	04/10/2008		7.31	6.42
	07/24/2008		7.76	5.97
	10/22/2008		8.02	5.71
	01/08/2009		5.35	8.38
	04/09/2009		5.10	8.63
	07/16/2009		7.20	6.53
	10/16/2009		5.27	8.44
	01/14/2010		7.59	6.14
	04/23/2010		4.77	8.96
	07/23/2010		7.05	6.68
	10/15/2010		7.69	6.03

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ16	01/28/2011	13.73	4.58	9.15
	04/19/2011		5.08	8.65
LF-PZ17	12/15/1997	12.82	1.72	11.10
	01/13/1998		0.62	12.20
	01/30/1998		0.82	12.00
	02/24/1998		1.16	11.66
	04/06/1998		3.54	9.28
	07/02/1998		5.36	7.46
	07/13/1998		5.41	7.41
	09/28/1998		6.05	6.77
	10/16/1998		6.19	6.63
	01/08/1999		3.92	8.90
	04/16/1999		3.37	9.45
	06/21/1999		7.09	5.73
	07/12/1999		7.14	5.68
	10/08/1999		7.21	5.61
	01/17/2000		6.39	6.43
	04/25/2000		2.57	10.25
	05/30/2000		3.62	9.20
	06/26/2000		NM	NM
	08/10/2000		5.85	6.97
	10/06/2000		6.05	6.77
	01/15/2001		4.11	8.71
	04/19/2001		3.15	9.67
	07/02/2001		6.07	6.75
	09/07/2001		NM	NM
	10/18/2001		5.85	6.97
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		2.70	10.12
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		5.54	7.28
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		4.80	8.02
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		5.81	7.01
	01/13/2003		2.91	9.91
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		4.65	8.17
	07/07/2003		6.42	6.40
	10/27/2003		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ17	11/18/2003	12.82	6.04	6.78
	01/15/2004		4.45	8.37
	04/21/2004		5.72	7.10
	07/13/2004		6.34	6.48
	10/12/2004		5.65	7.17
	01/25/2005		3.50	9.32
	04/25/2005		4.53	8.29
	07/20/2005		6.50	6.32
	10/21/2005		6.89	5.93
	01/20/2006		1.52	11.30
	04/27/2006		3.54	9.28
	07/20/2006		6.01	6.81
	10/19/2006		5.95	6.87
	01/18/2007		4.63	8.19
	04/12/2007		5.61	7.21
	07/19/2007		6.80	6.02
	10/12/2007		NM	NM
	01/17/2008		3.66	9.16
	04/10/2008		6.34	6.48
	07/24/2008		6.85	5.97
	10/22/2008		7.05	5.77
	01/08/2009		4.39	8.43
	04/09/2009		4.17	8.65
	07/16/2009		6.23	6.59
	10/16/2009		4.14	8.66
	01/14/2010		5.66	7.16
	04/23/2010		3.81	9.01
	07/23/2010		6.20	6.62
	10/15/2010		6.80	6.01
	01/28/2011		3.68	9.14
	04/19/2011		4.00	8.82
LF-PZ18	12/15/1997	15.71	5.85	9.86
	01/13/1998		4.77	10.94
	01/30/1998		4.78	10.93
	02/24/1998		4.66	11.05
	04/06/1998		6.17	9.54
	07/02/1998		7.66	8.05
	07/13/1998		7.87	7.84
	09/28/1998		8.34	7.37
	10/16/1998		8.18	7.53
	01/08/1999		6.55	9.16
	04/16/1999		5.37	10.34
	06/21/1999		7.08	8.63
	07/12/1999		7.66	8.05
	10/08/1999		8.91	6.80

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ18	01/17/2000	15.71	8.91	6.80
	04/25/2000		5.81	9.90
	05/30/2000		5.94	9.77
	06/26/2000		NM	NM
	08/10/2000		7.20	8.51
	10/06/2000		7.95	7.76
	01/15/2001		7.23	8.48
	04/19/2001		5.69	10.02
	07/02/2001		7.09	8.62
	09/07/2001		NM	NM
	10/18/2001		8.44	7.27
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		5.15	10.56
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		6.49	9.22
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		7.52	8.19
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		8.22	7.49
	01/13/2003		5.77	9.94
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		7.10	8.61
	07/07/2003		8.19	7.52
	10/27/2003		NM	NM
	11/18/2003		8.45	7.26
	01/15/2004		5.81	9.90
	04/21/2004		6.20	9.51
	07/13/2004		8.14	7.57
	10/12/2004		8.39	7.32
	01/25/2005		5.54	10.17
	04/25/2005		5.70	10.01
	07/20/2005		7.30	8.41
	10/21/2005		8.75	6.96
	01/23/2006		4.71	11.00
	04/27/2006		5.51	10.20
	07/20/2006		7.32	8.39
	10/19/2006		8.38	7.33
	01/18/2007		7.58	8.13
	04/12/2007		5.89	9.82
	07/19/2007		8.33	7.38

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ18	10/12/2007	15.71	8.23	7.48
	01/17/2008		5.88	9.83
	04/10/2008		6.17	9.54
	07/24/2008		8.72	6.99
	10/22/2008		9.01	6.70
	01/08/2009		7.64	8.07
	04/09/2009		5.52	10.19
	07/16/2009		6.73	8.98
	10/16/2009		7.57	8.12
	01/14/2010		6.01	9.70
	04/23/2010		5.49	10.22
	07/23/2010		6.80	8.91
	10/15/2010		8.60	7.10
	01/28/2011		5.50	10.21
	04/19/2011		5.46	10.25
LF-PZ19	12/15/1997	16.37	5.16	12.18
	01/13/1998		4.11	13.23
	01/30/1998		4.19	13.15
	02/24/1998		5.08	12.26
	04/06/1998		6.61	10.73
	07/02/1998		8.95	8.39
	07/13/1998		9.29	7.08
	09/28/1998		9.69	6.68
	10/16/1998		8.83	7.54
	01/08/1999		7.48	8.89
	04/16/1999		6.82	9.55
	06/21/1999		9.52	6.85
	07/12/1999		9.81	6.56
	10/08/1999		10.23	6.14
	01/17/2000		8.33	8.04
	04/25/2000		6.16	10.21
	05/30/2000		7.00	9.37
	06/26/2000		NM	NM
	08/10/2000		8.65	7.72
	10/06/2000		8.84	7.53
	01/15/2001		7.39	8.98
	04/19/2001		6.43	9.94
	07/02/2001		8.94	7.43
	09/07/2001		NM	NM
	10/18/2001		9.11	7.26
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		5.84	10.53
	02/21/2002		NM	NM
	03/25/2002		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ19	04/18/2002	16.37	7.94	8.43
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		8.03	8.34
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		8.71	7.66
	01/13/2003		6.50	9.87
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		7.30	9.07
	07/07/2003		9.19	7.18
	10/27/2003		NM	NM
	11/18/2003		8.71	7.66
	01/15/2004		7.25	9.12
	04/21/2004		8.26	8.11
	07/13/2004		9.26	7.11
	10/12/2004		9.10	7.27
	01/25/2005		6.74	9.63
	04/25/2005		7.54	8.83
	07/20/2005		9.10	7.27
	10/21/2005		9.89	6.48
	01/23/2006		5.75	10.62
	04/27/2006		7.02	9.35
	07/20/2006		9.12	7.25
	10/19/2006		9.30	7.07
	01/18/2007		7.61	8.76
	04/12/2007		7.94	8.43
	07/19/2007		9.44	6.93
	10/12/2007		7.86	8.51
	01/17/2008		6.83	9.54
	04/10/2008		9.01	7.36
	07/24/2008		9.97	6.40
	10/22/2008		10.09	6.28
	01/08/2009		7.85	8.52
	04/09/2009		7.27	9.10
	07/16/2009		9.14	7.23
	10/16/2009		7.43	8.92
	01/14/2010		8.75	7.62
	04/23/2010		7.18	9.19
	07/23/2010		9.11	7.26
	10/15/2010		9.74	6.62
	01/28/2011		7.18	9.19
	04/19/2011		7.27	9.10
LF-PZ2	12/15/1997	20.74	9.32	11.42

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ2	01/13/1998	20.74	10.11	10.63
	01/30/1998		9.43	11.31
	02/24/1998		8.76	11.98
	04/06/1998		9.79	10.95
	07/02/1998		10.55	10.19
	07/13/1998		10.66	10.08
	09/28/1998		11.12	9.62
	10/16/1998		11.22	9.52
	01/08/1999		10.90	9.84
	04/16/1999		9.82	10.92
	06/21/1999		11.02	9.72
	07/12/1999		11.30	9.44
	10/08/1999		11.59	9.15
	01/17/2000		11.60	9.14
	04/25/2000		10.69	10.05
	05/30/2000		11.15	9.59
	06/26/2000		11.35	9.39
	08/10/2000		11.78	8.96
	08/31/2000		11.63	9.11
	09/25/2000		11.44	9.30
	10/06/2000		11.46	9.28
	11/21/2000		11.89	8.85
	12/18/2000		11.85	8.89
	01/15/2001		11.41	9.33
	02/14/2001		11.20	9.54
	03/01/2001		9.95	10.79
	04/19/2001		11.03	9.71
	05/23/2001		11.68	9.06
	06/14/2001		11.76	8.98
	07/02/2001		11.61	9.13
	08/10/2001		11.59	9.15
	09/07/2001		11.62	9.12
	10/18/2001		11.80	8.94
	11/02/2001		11.88	8.86
	12/14/2001		10.42	10.32
	01/18/2002		9.72	11.02
	02/21/2002		10.29	10.45
	03/25/2002		10.30	10.44
	04/18/2002		10.61	10.13
	05/10/2002		10.99	9.75
	06/04/2002		11.87	8.87
	07/10/2002		11.14	9.60
	08/15/2002		11.13	9.61
	09/11/2002		10.92	9.82
	10/08/2002		11.21	9.53

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ2	11/07/2002	20.74	11.21	9.53
	12/12/2002		10.91	9.83
	01/13/2003		9.81	10.93
	02/26/2003		9.85	10.89
	03/19/2003		10.95	9.79
	04/14/2003		11.19	9.55
	05/13/2003		11.12	9.62
	06/13/2003		11.11	9.63
	07/07/2003		11.03	9.71
	08/13/2003		10.95	9.79
	09/17/2003		11.11	9.63
	10/27/2003		11.41	9.33
	11/18/2003		11.38	9.36
	12/19/2003		10.96	9.78
	01/15/2004		10.13	10.61
	02/17/2004		10.62	10.12
	03/18/2004		11.10	9.64
	04/21/2004		11.65	9.09
	05/18/2004		11.40	9.34
	06/10/2004		11.65	9.09
	07/13/2004		11.63	9.11
	08/12/2004		11.50	9.24
	09/16/2004		11.55	9.19
	10/12/2004		11.43	9.31
	11/17/2004		11.53	9.21
	12/15/2004		11.03	9.71
	01/25/2005		10.32	10.42
	02/15/2005		11.25	9.49
	03/15/2005		10.68	10.06
	04/25/2005		11.02	9.72
	05/20/2005		11.12	9.62
	06/21/2005		11.21	9.53
	07/20/2005		11.65	9.09
	08/22/2005		11.75	8.99
	09/16/2005		11.87	8.87
	10/21/2005		11.94	8.80
	11/18/2005		11.94	8.80
	12/16/2005		11.57	9.17
	01/20/2006		9.90	10.84
	02/22/2006		10.23	10.51
	03/30/2006		8.75	11.99
	04/27/2006		9.36	11.38
	05/18/2006		10.33	10.41
	06/22/2006		11.06	9.68
	07/20/2006		11.18	9.56

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ2	08/17/2006	20.74	11.27	9.47
	09/14/2006		11.20	9.54
	10/19/2006		11.33	9.41
	11/21/2006		11.33	9.41
	12/21/2006		10.10	10.64
	01/18/2007		10.43	10.31
	02/06/2007		10.62	10.12
	03/08/2007		9.57	11.17
	04/12/2007		10.30	10.44
	05/10/2007		10.11	10.63
	06/07/2007		10.93	9.81
	07/19/2007		11.08	9.66
	08/09/2007		11.17	9.57
	08/17/2007		10.95	9.79
	08/24/2007		10.85	9.89
	08/30/2007		10.78	9.96
	09/06/2007		10.72	10.02
	09/14/2007		10.65	10.09
	09/21/2007		10.48	10.26
	09/28/2007		10.48	10.26
	10/05/2007		10.50	10.24
	10/12/2007		10.36	10.38
	10/19/2007		10.28	10.46
	10/26/2007		10.12	10.62
	11/02/2007		10.24	10.50
	11/09/2007		10.19	10.55
	11/15/2007		10.01	10.73
	11/21/2007		10.06	10.68
	11/29/2007		10.09	10.65
	12/14/2007		9.99	10.75
	01/17/2008		9.35	11.39
	02/21/2008		9.75	10.99
	03/20/2008		10.48	10.26
	04/10/2008		11.18	9.56
	05/08/2008		11.17	9.57
	06/12/2008		11.18	9.56
	07/24/2008		11.42	9.32
	08/14/2008		11.39	9.35
	09/18/2008		11.30	9.44
	10/22/2008		11.41	9.33
	11/13/2008		11.40	9.34
	12/04/2008		11.27	9.47
	01/08/2009		10.80	9.94
	02/11/2009		10.58	10.16
	03/12/2009		8.30	12.44

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ2	04/09/2009	20.74	9.40	11.34
	05/20/2009		9.83	10.91
	06/17/2009		10.28	10.46
	07/16/2009		10.42	10.32
	08/13/2009		10.47	10.27
	09/10/2009		10.84	9.90
	10/16/2009		9.81	10.91
	11/12/2009		10.43	10.31
	12/03/2009		10.56	10.18
	01/14/2010		10.67	10.07
	02/18/2010		8.99	11.75
	03/25/2010		9.10	11.64
	04/23/2010		9.34	11.40
	05/21/2010		9.97	10.77
	06/10/2010		10.39	10.35
	07/23/2010		10.51	10.23
	08/12/2010		10.51	10.23
	09/10/2010		10.86	9.88
	10/15/2010		10.83	9.90
	11/04/2010		10.76	9.98
	12/03/2010		10.40	10.34
	01/28/2011		9.28	11.46
	02/10/2011		9.88	10.86
	03/31/2011		7.64	13.10
	04/19/2011		8.90	11.84
LF-PZ20	12/15/1997	16.15	5.78	10.37
	01/13/1998		3.81	12.34
	01/30/1998		5.28	10.87
	02/24/1998		3.21	12.94
	04/06/1998		4.97	11.18
	07/02/1998		6.61	9.54
	07/13/1998		7.83	8.32
	09/28/1998		6.85	9.30
	10/16/1998		7.12	9.03
	01/08/1999		6.53	9.62
	04/16/1999		5.39	10.76
	06/21/1999		7.24	8.91
	07/12/1999		7.45	8.70
	10/08/1999		7.60	8.55
	01/17/2000		7.00	9.15
	04/25/2000		5.36	10.79
	05/30/2000		5.93	10.22
	06/26/2000		NM	NM
	08/10/2000		7.80	8.35
	10/06/2000		6.82	9.33

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ20	01/15/2001	16.15	6.16	9.99
	04/19/2001		5.46	10.69
	07/02/2001		8.35	7.80
	09/07/2001		NM	NM
	10/18/2001		6.29	9.86
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		4.63	11.52
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		6.25	9.90
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		6.43	9.72
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		6.41	9.74
	01/13/2003		4.53	11.62
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		5.41	10.74
	07/07/2003		6.17	9.98
	10/27/2003		NM	NM
	11/18/2003		6.11	10.04
	01/15/2004		5.64	10.51
	04/21/2004		6.15	10.00
	07/13/2004		6.64	9.51
	10/12/2004		6.55	9.60
	01/25/2005		5.35	10.80
	04/25/2005		5.44	10.71
	07/20/2005		6.20	9.95
	10/21/2005		7.15	9.00
	01/20/2006		4.52	11.63
	04/27/2006		5.66	10.49
	07/20/2006		6.00	10.15
	10/19/2006		6.05	10.10
	01/18/2007		5.65	10.50
	04/12/2007		5.58	10.57
	07/19/2007		6.59	9.56
	10/05/2007		5.91	10.24
	10/12/2007		5.30	10.85
	10/26/2007		5.27	10.88
	11/02/2007		5.37	10.78
	01/17/2008		5.26	10.89
	04/10/2008		6.17	9.98

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ20	07/24/2008	16.15	6.98	9.17
	10/22/2008		6.68	9.47
	01/08/2009		5.46	10.69
	04/09/2009		5.58	10.57
	07/16/2009		6.12	10.03
	10/16/2009		5.18	10.95
	01/14/2010		5.41	10.74
	04/23/2010		5.07	11.08
	07/23/2010		6.25	9.90
	10/15/2010		6.65	9.49
	01/28/2011		5.16	10.99
	04/19/2011		5.28	10.87
LF-PZ21	06/21/1999	14.70	7.23	7.47
	07/12/1999		7.61	7.09
	10/08/1999		7.80	6.90
LF-PZ22	06/21/1999	14.96	5.58	9.38
	07/12/1999		5.96	9.00
	10/08/1999		6.10	8.86
LF-PZ23	06/21/1999	18.34	8.71	9.63
	07/12/1999		8.83	9.51
	10/08/1999		8.95	9.39
LF-PZ24	06/21/1999	18.97	9.74	9.23
	07/12/1999		9.91	9.06
	10/08/1999		10.00	8.97
LF-PZ25	06/21/1999	19.06	9.77	9.29
	07/12/1999		9.96	9.10
	10/08/1999		10.14	8.92
LF-PZ26	10/08/1999	21.40	12.39	9.01
	01/17/2000		11.69	9.71
	04/25/2000		10.64	10.76
	05/30/2000		11.46	9.94
	06/26/2000		NM	NM
	08/10/2000		12.02	9.38
	10/06/2000		12.92	8.48
	01/15/2001		10.97	10.43
	04/19/2001		11.05	10.35
	07/02/2001		11.87	9.53
	09/07/2001		NM	NM
	10/18/2001		11.60	9.80
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		10.40	11.00
	02/21/2002		NM	NM
	03/25/2002		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ26	04/18/2002	21.40	11.62	9.78
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		11.46	9.94
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		11.22	10.18
	01/13/2003		10.32	11.08
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		10.36	11.04
	07/07/2003		11.70	9.70
	10/27/2003		NM	NM
	01/15/2004		11.27	10.13
	04/21/2004		11.45	9.95
	07/13/2004		11.84	9.56
	10/12/2004		11.38	10.02
	01/25/2005		10.70	10.70
	02/15/2005		9.35	12.05
	04/25/2005		10.90	10.50
	07/20/2005		11.79	9.61
	10/21/2005		12.05	9.35
	01/20/2006		9.31	12.09
	04/27/2006		10.88	10.52
	07/20/2006		11.47	9.93
	10/19/2006		11.23	10.17
	01/18/2007		11.14	10.26
	04/12/2007		11.32	10.08
	07/19/2007		11.75	9.65
	08/17/2007		11.53	9.87
	08/24/2007		11.38	10.02
	08/30/2007		11.31	10.09
	09/06/2007		11.22	10.18
	09/14/2007		11.11	10.29
	09/21/2007		10.95	10.45
	09/28/2007		10.90	10.50
	10/05/2007		11.01	10.39
	10/12/2007		10.28	11.12
	10/19/2007		10.29	11.11
	10/26/2007		10.45	10.95
	11/02/2007		10.59	10.81
	11/09/2007		10.71	10.69
	11/15/2007		10.19	11.21
	11/21/2007		10.46	10.94
	11/29/2007		10.63	10.77

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ26	01/17/2008	21.40	10.42	10.98
	04/10/2008		11.37	10.03
	07/24/2008		11.95	9.45
	10/22/2008		11.69	9.71
	01/08/2009		10.59	10.81
	04/09/2009		10.87	10.53
	07/16/2009		11.52	9.88
	10/16/2009		10.33	11.05
	01/14/2010		10.94	10.46
	04/23/2010		10.29	11.11
	07/23/2010		11.30	10.10
	10/15/2010		11.61	9.78
	01/28/2011		10.71	10.69
	04/19/2011		10.89	10.51
LF-PZ27	01/17/2000	19.08	9.91	9.17
	04/25/2000		9.26	9.82
	05/30/2000		9.82	9.26
	06/26/2000		10.24	8.84
	08/10/2000		10.48	8.60
	08/31/2000		9.76	9.32
	09/25/2000		10.05	9.03
	10/06/2000		10.17	8.91
	11/21/2000		10.31	8.77
	12/18/2000		9.87	9.21
	01/15/2001		9.76	9.32
	02/14/2001		9.04	10.04
	03/01/2001		8.52	10.56
	04/19/2001		9.85	9.23
	05/23/2001		10.41	8.67
	06/14/2001		10.41	8.67
	07/02/2001		10.15	8.93
	08/10/2001		10.25	8.83
	09/07/2001		10.24	8.84
	10/18/2001		10.27	8.81
	11/02/2001		10.10	8.98
	12/14/2001		8.91	10.17
	01/18/2002		8.61	10.47
	02/21/2002		8.85	10.23
	03/25/2002		8.11	10.97
	04/18/2002		9.60	9.48
	05/10/2002		9.95	9.13
	06/04/2002		9.43	9.65
	07/10/2002		9.80	9.28
	08/15/2002		9.62	9.46
	09/11/2002		9.41	9.67

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ27	10/08/2002	19.08	9.43	9.65
	11/07/2002		9.76	9.32
	12/12/2002		9.64	9.44
	01/13/2003		8.05	11.03
	02/26/2003		8.01	11.07
	03/19/2003		9.21	9.87
	04/14/2003		9.00	10.08
	05/13/2003		9.01	10.07
	06/13/2003		9.22	9.86
	07/07/2003		9.19	9.89
	08/13/2003		9.46	9.62
	09/17/2003		9.55	9.53
	10/27/2003		NM	NM
	11/18/2003		9.62	9.46
	12/19/2003		8.88	10.20
	01/15/2004		8.70	10.38
	02/17/2004		8.83	10.25
	03/18/2004		9.20	9.88
	04/21/2004		9.86	9.22
	05/18/2004		9.77	9.31
	06/10/2004		9.70	9.38
	07/13/2004		9.64	9.44
	08/12/2004		9.80	9.28
	09/16/2004		9.86	9.22
	10/12/2004		9.67	9.41
	11/17/2004		9.46	9.62
	12/15/2004		8.83	10.25
	01/25/2005		8.68	10.40
	02/15/2005		9.35	9.73
	03/15/2005		8.87	10.21
	04/25/2005		8.97	10.11
	05/20/2005		9.10	9.98
	06/21/2005		9.35	9.73
	07/20/2005		9.97	9.11
	08/19/2005		10.20	8.88
	09/16/2005		10.09	8.99
	10/21/2005		10.25	8.83
	11/18/2005		10.11	8.97
	12/16/2005		9.71	9.37
	01/20/2006		8.23	10.85
	02/22/2006		8.35	10.73
	03/30/2006		7.96	11.12
	04/27/2006		7.99	11.09
	05/18/2006		8.40	10.68
	06/22/2006		9.12	9.96

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ27	07/20/2006	19.08	9.13	9.95
	08/17/2006		8.99	10.09
	09/14/2006		9.08	10.00
	10/19/2006		9.12	9.96
	11/21/2006		9.23	9.85
	12/21/2006		8.35	10.73
	01/18/2007		8.83	10.25
	02/06/2007		9.24	9.84
	03/08/2007		8.53	10.55
	04/12/2007		8.91	10.17
	05/10/2007		8.89	10.19
	06/07/2007		9.45	9.63
	07/19/2007		9.23	9.85
	08/09/2007		9.06	10.02
	09/14/2007		8.77	10.31
	10/12/2007		8.63	10.45
	11/09/2007		8.49	10.59
	12/14/2007		8.38	10.70
	01/17/2008		8.38	10.70
	02/21/2008		6.19	12.89
	03/20/2008		9.25	9.83
	04/10/2008		9.75	9.33
	05/08/2008		9.58	9.50
	06/12/2008		9.35	9.73
	07/24/2008		NM	NM
	08/14/2008		9.47	9.61
	09/18/2008		9.12	9.96
	10/22/2008		9.67	9.41
	11/13/2008		9.28	9.80
	12/04/2008		9.37	9.71
	01/08/2009		8.94	10.14
	02/11/2009		8.65	10.43
	03/12/2009		7.24	11.84
	04/09/2009		8.46	10.62
	05/20/2009		8.63	10.45
	06/17/2009		8.79	10.29
	07/16/2009		8.97	10.11
	08/13/2009		8.81	10.27
	09/10/2009		9.07	10.01
	10/16/2009		8.20	10.86
	11/12/2009		8.38	10.70
	12/03/2009		8.62	10.46
	01/14/2010		8.49	10.59
	02/18/2010		8.23	10.85
	03/25/2010		8.08	11.00

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ27	04/23/2010	19.08	7.82	11.26
	05/21/2010		8.60	10.48
	06/10/2010		8.90	10.18
	07/23/2010		8.69	10.39
	08/12/2010		8.80	10.28
	09/10/2010		8.89	10.19
	10/15/2010		9.31	9.76
	11/04/2010		8.84	10.24
	12/03/2010		8.64	10.44
	01/28/2011		8.31	10.77
	02/10/2011		8.37	10.71
	03/31/2011		6.70	12.38
	04/19/2011		7.98	11.10
LF-PZ28	01/17/2000	14.83	5.72	9.11
	04/25/2000		4.81	10.02
	05/30/2000		5.33	9.50
	06/26/2000		5.55	9.28
	08/10/2000		5.88	8.95
	08/31/2000		5.90	8.93
	09/25/2000		5.72	9.11
	10/06/2000		5.67	9.16
	11/21/2000		5.99	8.84
	12/18/2000		5.89	8.94
	01/15/2001		5.37	9.46
	02/14/2001		4.83	10.00
	03/01/2001		3.86	10.97
	04/19/2001		5.05	9.78
	05/23/2001		5.85	8.98
	06/14/2001		6.00	8.83
	07/02/2001		5.99	8.84
	08/10/2001		5.85	8.98
	09/07/2001		5.87	8.96
	10/18/2001		5.96	8.87
	11/02/2001		6.00	8.83
	12/14/2001		4.18	10.65
	01/18/2002		3.93	10.90
	02/21/2002		4.20	10.63
	03/25/2002		4.22	10.61
	04/18/2002		4.81	10.02
	05/10/2002		5.27	9.56
	06/04/2002		5.02	9.81
	07/10/2002		5.34	9.49
	08/15/2002		5.44	9.39
	09/11/2002		5.12	9.71
	10/08/2002		5.01	9.82

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ28	11/07/2002	14.83	4.56	10.27
	12/12/2002		5.70	9.13
	01/13/2003		3.65	11.18
	02/26/2003		3.60	11.23
	03/19/2003		4.89	9.94
	04/14/2003		4.90	9.93
	05/13/2003		5.00	9.83
	06/13/2003		5.14	9.69
	07/07/2003		5.02	9.81
	08/13/2003		5.16	9.67
	09/17/2003		5.30	9.53
	10/27/2003		5.51	9.32
	11/18/2003		5.45	9.38
	12/19/2003		4.70	10.13
	01/15/2004		4.18	10.65
	02/17/2004		4.13	10.70
	03/18/2004		5.09	9.74
	04/21/2004		5.79	9.04
	05/18/2004		5.41	9.42
	06/10/2004		7.15	7.68
	07/13/2004		5.70	9.13
	08/12/2004		5.65	9.18
	09/16/2004		5.63	9.20
	10/12/2004		5.45	9.38
	11/17/2004		5.41	9.42
	12/15/2004		4.91	9.92
	01/25/2005		4.56	10.27
	02/15/2005		5.13	9.70
	03/15/2005		4.89	9.94
	04/25/2005		5.12	9.71
	05/20/2005		5.12	9.71
	06/21/2005		5.29	9.54
	07/20/2005		5.82	9.01
	08/22/2005		6.15	8.68
	09/16/2005		6.05	8.78
	10/21/2005		6.16	8.67
	11/18/2005		7.00	7.83
	12/16/2005		5.59	9.24
	01/20/2006		3.66	11.17
	02/22/2006		4.40	10.43
	03/30/2006		2.16	12.67
	04/27/2006		3.40	11.43
	05/18/2006		4.59	10.24
	06/22/2006		5.29	9.54
	07/20/2006		5.35	9.48

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ28	08/17/2006	14.83	5.50	9.33
	09/14/2006		5.31	9.52
	10/19/2006		5.31	9.52
	11/21/2006		5.35	9.48
	12/21/2006		3.90	10.93
	01/18/2007		4.93	9.90
	02/06/2007		4.72	10.11
	03/08/2007		3.71	11.12
	04/12/2007		4.44	10.39
	05/10/2007		4.21	10.62
	06/07/2007		5.28	9.55
	07/19/2007		5.25	9.58
	08/09/2007		5.28	9.55
	08/17/2007		5.17	9.66
	08/24/2007		4.96	9.87
	08/30/2007		4.85	9.98
	09/06/2007		4.80	10.03
	09/14/2007		4.73	10.10
	09/21/2007		4.63	10.20
	09/28/2007		4.59	10.24
	10/05/2007		4.61	10.22
	10/12/2007		4.44	10.39
	10/19/2007		4.29	10.54
	10/26/2007		4.18	10.65
	11/02/2007		4.24	10.59
	11/09/2007		4.33	10.50
	11/15/2007		4.05	10.78
	11/21/2007		4.12	10.71
	11/29/2007		4.22	10.61
	12/14/2007		3.97	10.86
	01/17/2008		3.43	11.40
	02/21/2008		3.56	11.27
	03/20/2008		4.75	10.08
	04/10/2008		5.46	9.37
	05/08/2008		5.37	9.46
	06/12/2008		6.48	8.35
	07/24/2008		5.72	9.11
	08/14/2008		5.62	9.21
	09/18/2008		5.39	9.44
	10/22/2008		5.56	9.27
	11/13/2008		5.45	9.38
	12/04/2008		5.41	9.42
	01/08/2009		4.82	10.01
	02/11/2009		4.21	10.62
	03/12/2009		2.37	12.46

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ28	04/09/2009	14.83	3.67	11.16
	05/20/2009		3.99	10.84
	06/17/2009		4.48	10.35
	07/16/2009		4.59	10.24
	08/13/2009		4.62	10.21
	09/10/2009		4.97	9.86
	10/16/2009		3.41	11.40
	11/12/2009		4.53	10.30
	12/03/2009		4.62	10.21
	01/14/2010		4.67	10.16
	02/18/2010		3.08	11.75
	03/25/2010		3.35	11.48
	04/23/2010		3.31	11.52
	05/21/2010		4.14	10.69
	06/10/2010		4.67	10.16
	07/23/2010		4.67	10.16
	08/12/2010		4.68	10.15
	09/10/2010		4.72	10.11
	10/15/2010		5.06	9.76
	11/04/2010		4.91	9.92
	12/03/2010		4.47	10.36
	01/28/2011		3.47	11.36
	02/10/2011		4.01	10.82
	03/31/2011		1.83	13.00
	04/19/2011		3.25	11.58
LF-PZ29	01/17/2000	14.45	7.48	6.97
	04/25/2000		4.13	10.32
	05/30/2000		5.41	9.04
	06/26/2000		5.95	8.50
	08/10/2000		7.36	7.09
	08/31/2000		7.01	7.44
	09/25/2000		7.24	7.21
	10/06/2000		7.56	6.89
	11/21/2000		6.35	8.10
	12/18/2000		6.04	8.41
	01/15/2001		5.75	8.70
	02/14/2001		4.91	9.54
	03/01/2001		3.85	10.60
	04/19/2001		4.25	10.20
	05/23/2001		6.26	8.19
	06/14/2001		7.11	7.34
	07/02/2001		7.72	6.73
	08/10/2001		6.64	7.81
	09/07/2001		7.19	7.26
	10/18/2001		7.21	7.24

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ29	11/02/2001	14.45	7.44	7.01
	12/14/2001		2.49	11.96
	01/18/2002		4.30	10.15
	02/21/2002		5.81	8.64
	03/25/2002		5.62	8.83
	04/18/2002		7.16	7.29
	05/10/2002		5.59	8.86
	06/04/2002		6.10	8.35
	07/10/2002		6.26	8.19
	08/15/2002		6.71	7.74
	09/11/2002		6.82	7.63
	10/08/2002		7.01	7.44
	11/07/2002		6.99	7.46
	12/12/2002		6.85	7.60
	01/13/2003		4.50	9.95
	02/26/2003		5.23	9.22
	03/19/2003		6.52	7.93
	04/14/2003		5.59	8.86
	05/13/2003		6.62	7.83
	06/13/2003		5.10	9.35
	07/07/2003		7.80	6.65
	08/13/2003		7.90	6.55
	09/17/2003		7.66	6.79
	10/27/2003		7.72	6.73
	11/18/2003		7.37	7.08
	12/19/2003		6.45	8.00
	01/15/2004		6.00	8.45
	02/17/2004		5.61	8.84
	03/18/2004		6.60	7.85
	04/21/2004		6.95	7.50
	05/18/2004		6.80	7.65
	06/10/2004		6.95	7.50
	07/13/2004		7.66	6.79
	08/12/2004		7.71	6.74
	09/16/2004		8.60	5.85
	10/12/2004		6.48	7.97
	11/17/2004		5.94	8.51
	12/15/2004		5.15	9.30
	01/25/2005		4.84	9.61
	02/15/2005		6.22	8.23
	03/15/2005		4.94	9.51
	04/25/2005		5.83	8.62
	05/20/2005		5.58	8.87
	06/21/2005		6.51	7.94
	07/20/2005		7.04	7.41

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ29	08/22/2005	14.45	8.00	6.45
	09/16/2005		8.00	6.45
	10/21/2005		8.13	6.32
	11/18/2005		7.33	7.12
	12/16/2005		6.47	7.98
	01/20/2006		3.00	11.45
	02/22/2006		6.09	8.36
	03/30/2006		2.97	11.48
	04/27/2006		5.17	9.28
	05/18/2006		7.00	7.45
	06/22/2006		7.25	7.20
	07/20/2006		7.27	7.18
	08/17/2006		7.50	6.95
	09/14/2006		7.37	7.08
	10/19/2006		7.34	7.11
	11/21/2006		6.66	7.79
	12/21/2006		5.38	9.07
	01/18/2007		5.92	8.53
	02/06/2007		6.55	7.90
	03/08/2007		5.32	9.13
	04/12/2007		6.43	8.02
	05/10/2007		6.03	8.42
	06/07/2007		7.50	6.95
	07/19/2007		8.05	6.40
	08/09/2007		8.01	6.44
	08/17/2007		7.85	6.60
	08/24/2007		7.59	6.86
	08/30/2007		7.30	7.15
	09/06/2007		7.09	7.36
	09/14/2007		6.86	7.59
	09/21/2007		6.70	7.75
	09/28/2007		6.62	7.83
	10/05/2007		6.53	7.92
	10/12/2007		5.90	8.55
	10/19/2007		5.38	9.07
	10/26/2007		5.35	9.10
	11/02/2007		5.26	9.19
	11/09/2007		5.26	9.19
	11/15/2007		4.74	9.71
	11/21/2007		4.72	9.73
	11/29/2007		4.73	9.72
	12/14/2007		4.98	9.47
	01/17/2008		5.16	9.29
	02/21/2008		5.02	9.43
	03/20/2008		6.81	7.64

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ29	04/10/2008	14.45	7.31	7.14
	05/08/2008		7.55	6.90
	06/12/2008		7.81	6.64
	07/24/2008		8.01	6.44
	08/14/2008		8.28	6.17
	09/18/2008		8.28	6.17
	10/22/2008		8.23	6.22
	11/13/2008		6.59	7.86
	12/04/2008		7.16	7.29
	01/08/2009		5.87	8.58
	02/11/2009		6.35	8.10
	03/12/2009		3.58	10.87
	04/09/2009		5.55	8.90
	05/20/2009		5.68	8.77
	06/17/2009		7.25	7.20
	07/16/2009		7.50	6.95
	08/13/2009		7.68	6.77
	09/10/2009		7.69	6.76
	10/16/2009		4.98	9.45
	11/12/2009		6.67	7.78
	12/03/2009		7.48	6.97
	01/14/2010		6.59	7.86
	02/18/2010		4.13	10.32
	03/25/2010		5.14	9.31
	04/23/2010		5.17	9.28
	05/21/2010		6.28	8.17
	06/10/2010		6.45	8.00
	07/23/2010		6.93	7.52
	08/12/2010		7.06	7.39
	09/10/2010		7.57	6.88
	10/15/2010		7.93	6.51
	11/04/2010		7.65	6.80
	12/03/2010		5.86	8.59
	01/28/2011		5.25	9.20
	02/10/2011		5.51	8.94
	03/31/2011		3.14	11.31
	04/19/2011		5.54	8.91
LF-PZ3	12/15/1997	20.70	9.45	11.25
	01/13/1998		8.31	12.39
	01/30/1998		8.46	12.24
	02/24/1998		7.81	12.89
	04/06/1998		9.95	10.75
	07/02/1998		11.29	9.41
	07/13/1998		11.33	9.37
	09/28/1998		11.72	8.98

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ3	10/16/1998	20.70	11.96	8.74
	01/08/1999		11.25	9.45
	04/16/1999		10.70	10.00
	06/21/1999		12.38	8.32
	07/12/1999		12.42	8.28
	10/08/1999		12.74	7.96
	01/17/2000		12.43	8.27
	04/25/2000		10.20	10.50
	05/30/2000		11.23	9.47
	06/26/2000		11.80	8.90
	08/10/2000		12.07	8.63
	08/31/2000		12.04	8.66
	09/25/2000		11.80	8.90
	10/06/2000		12.02	8.68
	11/21/2000		12.24	8.46
	12/18/2000		11.54	9.16
	01/15/2001		11.12	9.58
	02/14/2001		9.41	11.29
	03/01/2001		8.48	12.22
	04/19/2001		10.45	10.25
	05/23/2001		11.65	9.05
	06/14/2001		11.65	9.05
	07/02/2001		11.79	8.91
	08/10/2001		11.65	9.05
	09/07/2001		11.60	9.10
	10/18/2001		11.60	9.10
	11/02/2001		11.81	8.89
	12/14/2001		8.33	12.37
	01/18/2002		9.43	11.27
	02/21/2002		10.72	9.98
	03/25/2002		10.79	9.91
	04/18/2002		11.17	9.53
	05/10/2002		11.45	9.25
	06/04/2002		11.16	9.54
	07/10/2002		11.29	9.41
	08/15/2002		11.44	9.26
	09/11/2002		6.51	14.19
	10/08/2002		11.31	9.39
	11/07/2002		11.48	3.22
	12/12/2002		10.51	4.19
	01/13/2003		9.96	4.74
	02/26/2003		10.55	4.15
	03/19/2003		10.64	10.06
	04/14/2003		10.90	9.80
	05/13/2003		11.23	9.47

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ3	06/13/2003	20.70	11.93	8.77
	07/07/2003		12.22	8.48
	08/13/2003		12.31	8.39
	09/17/2003		12.20	8.50
	10/27/2003		12.52	8.18
	11/18/2003		12.30	8.40
	12/19/2003		11.28	9.42
	01/15/2004		10.65	10.05
	02/17/2004		11.01	9.69
	03/18/2004		11.02	9.68
	04/21/2004		11.75	8.95
	05/18/2004		11.55	9.15
	06/10/2004		11.90	8.80
	07/13/2004		12.16	8.54
	08/12/2004		12.05	8.65
	09/16/2004		12.30	8.40
	10/12/2004		11.87	8.83
	11/17/2004		10.48	10.22
	12/15/2004		9.83	10.87
	01/25/2005		9.81	10.89
	02/15/2005		10.96	9.74
	03/15/2005		8.10	12.60
	04/25/2005		10.42	10.28
	05/20/2005		11.02	9.68
	06/21/2005		11.10	9.60
	07/20/2005		11.73	8.97
	08/22/2005		11.96	8.74
	09/16/2005		12.10	8.60
	10/21/2005		12.20	8.50
	11/18/2005		11.55	9.15
	12/16/2005		10.87	9.83
	01/20/2006		8.55	12.15
	02/22/2006		10.54	10.16
	03/30/2006		8.02	12.68
	04/27/2006		10.10	10.60
	05/18/2006		11.06	9.64
	06/22/2006		11.47	9.23
	07/20/2006		11.53	9.17
	08/17/2006		11.53	9.17
	09/14/2006		11.61	9.09
	10/19/2006		11.29	9.41
	11/21/2006		11.04	9.66
	12/21/2006		10.12	10.58
	01/18/2007		10.88	9.82
	02/06/2007		11.16	9.54

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ3	03/08/2007	20.70	9.60	11.10
	04/12/2007		10.88	9.82
	05/10/2007		10.48	10.22
	06/07/2007		11.20	9.50
	07/19/2007		11.62	9.08
	08/09/2007		11.75	8.95
	08/17/2007		11.63	9.07
	08/24/2007		11.55	9.15
	08/30/2007		11.48	9.22
	09/06/2007		11.38	9.32
	09/14/2007		11.32	9.38
	09/21/2007		11.13	9.57
	09/28/2007		11.06	9.64
	10/05/2007		11.01	9.69
	10/12/2007		10.84	9.86
	10/19/2007		10.10	10.60
	10/26/2007		10.11	10.59
	11/02/2007		10.28	10.42
	11/09/2007		10.28	10.42
	11/15/2007		9.79	10.91
	11/21/2007		9.97	10.73
	11/29/2007		10.13	10.57
	12/14/2007		10.04	10.66
	01/17/2008		9.71	10.99
	02/21/2008		9.90	10.80
	03/20/2008		10.82	9.88
	04/10/2008		11.20	9.50
	05/08/2008		11.31	9.39
	06/12/2008		11.39	9.31
	07/24/2008		11.78	8.92
	08/14/2008		11.77	8.93
	09/18/2008		11.89	8.81
	10/22/2008		11.88	8.82
	11/13/2008		11.38	9.32
	12/04/2008		11.34	9.36
	01/08/2009		10.56	10.14
	02/11/2009		10.90	9.80
	03/12/2009		8.84	11.86
	04/09/2009		10.39	10.31
	05/20/2009		10.26	10.44
	06/17/2009		10.97	9.73
	07/16/2009		11.25	9.45
	08/13/2009		11.43	9.27
	09/10/2009		11.57	9.13
	10/16/2009		10.09	10.59

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ3	11/12/2009	20.70	10.96	9.74
	12/03/2009		11.34	9.36
	01/14/2010		10.92	9.78
	02/18/2010		9.60	11.10
	03/25/2010		10.18	10.52
	04/23/2010		9.83	10.87
	05/21/2010		10.72	9.98
	06/10/2010		10.94	9.76
	07/23/2010		11.20	9.50
	08/12/2010		11.29	9.41
	09/10/2010		11.84	8.86
	10/15/2010		11.82	8.87
	11/04/2010		11.52	9.18
	12/03/2010		10.55	10.15
	01/28/2011		9.97	10.73
	02/10/2011		10.42	10.28
	03/31/2011		7.85	12.85
	04/19/2011		10.27	10.43
LF-PZ30	01/17/2000	18.41	8.27	10.14
	04/25/2000		7.89	10.52
	05/30/2000		8.14	10.27
	06/26/2000		8.29	10.12
	08/10/2000		8.52	9.89
	08/31/2000		8.38	10.03
	09/25/2000		8.47	9.94
	10/06/2000		8.51	9.90
	11/21/2000		8.08	10.33
	12/18/2000		8.08	10.33
	01/15/2001		7.99	10.42
	02/14/2001		7.50	10.91
	03/01/2001		7.27	11.14
	04/19/2001		8.04	10.37
	05/23/2001		8.36	10.05
	06/14/2001		8.30	10.11
	07/02/2001		8.31	10.10
	08/10/2001		8.18	10.23
	09/07/2001		8.20	10.21
	10/18/2001		8.20	10.21
	11/02/2001		8.21	10.20
	12/14/2001		7.14	11.27
	01/18/2002		7.48	10.93
	02/21/2002		7.52	10.89
	03/25/2002		7.63	10.78
	04/18/2002		7.99	10.42
	05/10/2002		8.11	10.30

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ30	06/04/2002	18.41	7.99	10.42
	07/10/2002		8.14	10.27
	08/15/2002		8.21	10.20
	09/11/2002		8.05	10.36
	10/08/2002		8.15	10.26
	11/07/2002		8.07	10.34
	12/12/2002		8.04	10.37
	01/13/2003		7.03	11.38
	02/26/2003		7.29	11.12
	03/19/2003		7.51	10.90
	04/14/2003		7.36	11.05
	05/13/2003		7.65	10.76
	06/13/2003		8.00	10.41
	07/07/2003		7.95	10.46
	08/13/2003		8.12	10.29
	09/17/2003		8.10	10.31
	10/27/2003		8.23	10.18
	11/18/2003		8.07	10.34
	12/19/2003		7.58	10.83
	01/15/2004		7.41	11.00
	02/17/2004		7.16	11.25
	03/18/2004		7.65	10.76
	04/21/2004		7.92	10.49
	05/18/2004		8.05	10.36
	06/10/2004		8.00	10.41
	07/13/2004		8.08	10.33
	08/12/2004		8.10	10.31
	09/16/2004		8.23	10.18
	10/12/2004		8.15	10.26
	11/17/2004		7.74	10.67
	12/15/2004		7.48	10.93
	01/24/2005		7.37	11.04
	02/15/2005		7.55	10.86
	03/15/2005		7.45	10.96
	04/25/2005		7.53	10.88
	05/20/2005		7.68	10.73
	06/21/2005		7.88	10.53
	07/20/2005		8.12	10.29
	08/22/2005		8.24	10.17
	09/16/2005		8.30	10.11
	10/21/2005		8.42	9.99
	11/18/2005		8.16	10.25
	12/16/2005		8.01	10.40
	01/20/2006		NM	NM
	02/22/2006		7.30	11.11

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ30	03/30/2006	18.41	6.56	11.85
	04/27/2006		7.05	11.36
	05/18/2006		7.50	10.91
	06/22/2006		7.74	10.67
	07/20/2006		7.81	10.60
	08/17/2006		7.80	10.61
	09/14/2006		7.80	10.61
	10/19/2006		7.80	10.61
	11/21/2006		7.73	10.68
	12/21/2006		7.10	11.31
	01/18/2007		7.68	10.73
	02/06/2007		7.90	10.51
	03/08/2007		7.38	11.03
	04/12/2007		7.72	10.69
	05/10/2007		7.59	10.82
	06/07/2007		7.88	10.53
	07/19/2007		7.91	10.50
	08/09/2007		7.93	10.48
	09/14/2007		7.70	10.71
	10/12/2007		7.51	10.90
	11/09/2007		7.67	10.74
	12/14/2007		7.49	10.92
	01/17/2008		7.33	11.08
	02/21/2008		7.03	11.38
	03/20/2008		7.73	10.68
	04/10/2008		8.05	10.36
	05/08/2008		7.99	10.42
	06/12/2008		7.96	10.45
	07/24/2008		8.16	10.25
	08/14/2008		8.14	10.27
	09/18/2008		8.06	10.35
	10/22/2008		8.19	10.22
	11/13/2008		7.67	10.74
	12/04/2008		7.84	10.57
	01/08/2009		7.51	10.90
	02/11/2009		7.36	11.05
	03/12/2009		6.75	11.66
	04/09/2009		7.29	11.12
	05/20/2009		7.49	10.92
	06/17/2009		7.65	10.76
	07/16/2009		7.76	10.65
	08/13/2009		7.70	10.71
	09/10/2009		7.89	10.52
	10/16/2009		7.17	11.22
	11/12/2009		7.51	10.90

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ30	12/03/2009	18.41	7.65	10.76
	01/14/2010		7.45	10.96
	02/18/2010		6.97	11.44
	03/25/2010		7.14	11.27
	04/23/2010		7.07	11.34
	05/21/2010		7.45	10.96
	06/10/2010		7.62	10.79
	07/23/2010		7.66	10.75
	08/12/2010		7.77	10.64
	09/10/2010		7.85	10.56
	10/15/2010		8.01	10.39
	11/04/2010		7.66	10.75
	12/03/2010		7.46	10.95
	01/28/2011		7.36	11.05
	02/10/2011		7.50	10.91
	03/31/2011		6.45	11.96
	04/19/2011		7.27	11.14
LF-PZ31	01/17/2000	18.25	8.45	9.80
	04/25/2000		7.90	10.35
	05/30/2000		8.27	9.98
	06/26/2000		8.48	9.77
	08/10/2000		8.41	9.84
	08/31/2000		8.38	9.87
	09/25/2000		8.60	9.65
	10/06/2000		8.31	9.94
	11/21/2000		8.23	10.02
	12/18/2000		8.15	10.10
	01/15/2001		8.13	10.12
	02/14/2001		7.54	10.71
	03/01/2001		7.19	11.06
	04/19/2001		8.10	10.15
	05/23/2001		8.52	9.73
	06/14/2001		8.46	9.79
	07/02/2001		8.45	9.80
	08/10/2001		8.15	10.10
	09/07/2001		8.23	10.02
	10/18/2001		8.48	9.77
	11/02/2001		8.34	9.91
	12/14/2001		7.41	10.84
	01/18/2002		7.37	10.88
	02/21/2002		7.49	10.76
	03/25/2002		7.59	10.66
	04/18/2002		8.01	10.24
	05/10/2002		8.22	10.03
	06/04/2002		7.97	10.28

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ31	07/10/2002	18.25	8.23	10.02
	08/15/2002		8.24	10.01
	09/11/2002		8.07	10.18
	10/08/2002		8.21	10.04
	11/07/2002		8.13	10.12
	12/12/2002		8.04	10.21
	01/13/2003		9.01	9.24
	02/26/2003		7.01	11.24
	03/19/2003		7.49	10.76
	04/14/2003		7.44	10.81
	05/13/2003		7.69	10.56
	06/13/2003		7.98	10.27
	07/07/2003		8.02	10.23
	08/13/2003		8.15	10.10
	09/17/2003		8.15	10.10
	10/27/2003		8.28	9.97
	11/18/2003		8.09	10.16
	12/19/2003		7.50	10.75
	01/15/2004		7.33	10.92
	02/17/2004		7.19	11.06
	03/18/2004		7.68	10.57
	04/21/2004		7.98	10.27
	05/18/2004		8.05	10.20
	06/10/2004		7.98	10.27
	07/13/2004		8.09	10.16
	08/12/2004		8.15	10.10
	09/16/2004		8.30	9.95
	10/12/2004		8.19	10.06
	11/17/2004		7.71	10.54
	12/15/2004		7.49	10.76
	01/24/2005		7.41	10.84
	02/15/2005		7.47	10.78
	03/15/2005		7.40	10.85
	04/25/2005		7.44	10.81
	05/20/2005		7.58	10.67
	06/21/2005		7.86	10.39
	07/20/2005		8.15	10.10
	08/22/2005		8.31	9.94
	09/16/2005		8.35	9.90
	10/21/2005		8.48	9.77
	11/18/2005		8.25	10.00
	12/16/2005		7.99	10.26
	01/20/2006		NM	NM
	02/22/2006		7.05	11.20
	03/30/2006		6.09	12.16

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ31	04/27/2006	18.25	6.76	11.49
	05/18/2006		7.25	11.00
	06/22/2006		7.55	10.70
	07/20/2006		7.55	10.70
	08/17/2006		7.49	10.76
	09/14/2006		7.56	10.69
	10/19/2006		7.57	10.68
	11/21/2006		7.56	10.69
	12/21/2006		7.02	11.23
	01/18/2007		7.49	10.76
	02/06/2007		7.73	10.52
	03/08/2007		7.15	11.10
	04/12/2007		7.56	10.69
	05/10/2007		7.33	10.92
	06/07/2007		7.68	10.57
	07/19/2007		7.71	10.54
	08/09/2007		7.70	10.55
	09/14/2007		NM	NM
	10/12/2007		7.34	10.91
	11/09/2007		NM	NM
	12/14/2007		NM	NM
	01/17/2008		NM	NM
	02/21/2008		NM	NM
	03/20/2008		7.57	10.68
	04/10/2008		7.89	10.36
	05/08/2008		7.87	10.38
	06/12/2008		7.82	10.43
	07/24/2008		7.98	10.27
	08/14/2008		7.92	10.33
	09/18/2008		7.84	10.41
	10/22/2008		8.03	10.22
	11/13/2008		7.54	10.71
	12/04/2008		7.58	10.67
	01/08/2009		7.24	11.01
	02/11/2009		7.22	11.03
	03/12/2009		6.32	11.93
	04/09/2009		7.05	11.20
	05/20/2009		7.17	11.08
	06/17/2009		7.34	10.91
	07/16/2009		7.49	10.76
	08/13/2009		7.42	10.83
	09/10/2009		7.65	10.60
	10/16/2009		6.88	11.35
	11/12/2009		7.22	11.03
	12/03/2009		7.39	10.86

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ31	01/14/2010	18.25	7.27	10.98
	02/18/2010		6.64	11.61
	03/25/2010		6.80	11.45
	04/23/2010		6.77	11.48
	05/21/2010		7.19	11.06
	06/10/2010		7.40	10.85
	07/23/2010		7.38	10.87
	08/12/2010		7.50	10.75
	09/10/2010		7.56	10.69
	10/15/2010		7.82	10.42
	11/04/2010		7.47	10.78
	12/03/2010		7.25	11.00
	01/28/2011		7.04	11.21
	02/10/2011		7.28	10.97
	03/31/2011		6.12	12.13
	04/19/2011		7.03	11.22
LF-PZ32	01/17/2000	19.19	10.05	9.14
	04/25/2000		9.42	9.77
	05/30/2000		9.79	9.40
	06/26/2000		10.07	9.12
	08/10/2000		10.30	8.89
	08/31/2000		9.73	9.46
	09/25/2000		9.95	9.24
	10/06/2000		10.03	9.16
	11/21/2000		10.07	9.12
	12/18/2000		9.80	9.39
	01/15/2001		9.68	9.51
	02/14/2001		9.11	10.08
	03/01/2001		8.56	10.63
	04/19/2001		9.52	9.67
	05/23/2001		9.85	9.34
	06/14/2001		10.02	9.17
	07/02/2001		10.03	9.16
	08/10/2001		9.75	9.44
	09/07/2001		9.83	9.36
	10/18/2001		10.02	9.17
	11/02/2001		10.03	9.16
	12/14/2001		8.60	10.59
	01/18/2002		8.65	10.54
	02/21/2002		8.91	10.28
	03/25/2002		8.04	11.15
	04/18/2002		9.52	9.67
	05/10/2002		9.79	9.40
	06/04/2002		8.29	10.90
	07/10/2002		9.82	9.37

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ32	08/15/2002	19.19	9.74	9.45
	09/11/2002		8.49	10.70
	10/08/2002		9.61	9.58
	11/07/2002		9.75	9.44
	12/12/2002		9.54	9.65
	01/13/2003		8.02	11.17
	02/26/2003		8.05	11.14
	03/19/2003		8.94	10.25
	04/14/2003		9.26	9.93
	05/13/2003		8.95	10.24
	06/13/2003		9.25	9.94
	07/07/2003		9.30	9.89
	08/13/2003		9.44	9.75
	09/17/2003		9.17	10.02
	10/27/2003		NM	NM
	11/18/2003		9.54	9.65
	12/19/2003		8.86	10.33
	01/15/2004		8.46	10.73
	02/17/2004		8.71	10.48
	03/18/2004		8.81	10.38
	04/21/2004		9.46	9.73
	05/18/2004		9.23	9.96
	06/10/2004		9.45	9.74
	07/13/2004		9.47	9.72
	08/12/2004		9.51	9.68
	09/16/2004		9.70	9.49
	10/12/2004		9.60	9.59
	11/17/2004		9.21	9.98
	12/15/2004		8.84	10.35
	01/25/2005		8.68	10.51
	02/15/2005		8.88	10.31
	03/15/2005		8.45	10.74
	04/25/2005		8.85	10.34
	05/20/2005		8.82	10.37
	06/21/2005		9.00	10.19
	07/20/2005		9.34	9.85
	08/22/2005		9.78	9.41
	09/16/2005		9.80	9.39
	10/21/2005		9.97	9.22
	11/18/2005		9.77	9.42
	12/16/2005		9.42	9.77
	01/20/2006		8.29	10.90
	02/22/2006		8.15	11.04
	03/30/2006		7.85	11.34
	04/27/2006		7.97	11.22

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ32	05/18/2006	19.19	8.38	10.81
	06/22/2006		8.72	10.47
	07/20/2006		8.82	10.37
	08/17/2006		8.76	10.43
	09/14/2006		8.83	10.36
	10/19/2006		8.70	10.49
	11/21/2006		8.90	10.29
	12/21/2006		8.33	10.86
	01/18/2007		8.40	10.79
	02/06/2007		9.12	10.07
	03/08/2007		8.45	10.74
	04/12/2007		8.65	10.54
	05/10/2007		8.72	10.47
	06/07/2007		9.03	10.16
	07/19/2007		9.02	10.17
	08/09/2007		9.01	10.18
	09/14/2007		8.91	10.28
	10/12/2007		8.69	10.50
	11/09/2007		8.64	10.55
	12/14/2007		8.50	10.69
	01/17/2008		8.22	10.97
	02/21/2008		8.14	11.05
	03/20/2008		8.90	10.29
	04/10/2008		9.29	9.90
	05/08/2008		9.28	9.91
	06/12/2008		9.09	10.10
	07/24/2008		9.34	9.85
	08/14/2008		9.25	9.94
	09/18/2008		9.08	10.11
	10/22/2008		9.40	9.79
	11/13/2008		8.94	10.25
	12/04/2008		8.99	10.20
	01/08/2009		8.70	10.49
	02/11/2009		8.54	10.65
	03/12/2009		7.43	11.76
	04/09/2009		8.24	10.95
	05/20/2009		8.44	10.75
	06/17/2009		8.58	10.61
	07/16/2009		8.67	10.52
	08/13/2009		8.58	10.61
	09/10/2009		8.87	10.32
	10/16/2009		8.05	11.12
	11/12/2009		8.43	10.76
	12/03/2009		8.63	10.56
	01/14/2010		8.46	10.73

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ32	02/18/2010	19.19	7.79	11.40
	03/25/2010		7.83	11.36
	04/23/2010		7.90	11.29
	05/21/2010		8.40	10.79
	06/10/2010		8.64	10.55
	07/23/2010		8.54	10.65
	08/12/2010		8.69	10.50
	09/10/2010		8.78	10.41
	10/15/2010		9.03	10.15
	11/04/2010		8.74	10.45
	12/03/2010		8.51	10.68
	01/28/2011		8.11	11.08
	02/10/2011		8.30	10.89
	03/31/2011		6.94	12.25
	04/19/2011		8.00	11.19
LF-PZ33	01/17/2000	21.59	11.71	9.88
	04/25/2000		10.98	10.61
	05/30/2000		11.30	10.29
	06/26/2000		11.51	10.08
	08/10/2000		11.76	9.83
	08/31/2000		11.70	9.89
	09/25/2000		11.72	9.87
	10/06/2000		11.75	9.84
	11/21/2000		11.49	10.10
	12/18/2000		11.40	10.19
	01/15/2001		11.34	10.25
	02/14/2001		10.94	10.65
	03/01/2001		10.08	11.51
	04/19/2001		11.15	10.44
	05/23/2001		11.54	10.05
	06/14/2001		11.47	10.12
	07/02/2001		11.49	10.10
	08/10/2001		11.44	10.15
	09/07/2001		11.93	9.66
	10/18/2001		11.39	10.20
	11/02/2001		11.55	10.04
	12/14/2001		10.22	11.37
	01/18/2002		10.33	11.26
	02/21/2002		10.72	10.87
	03/25/2002		10.72	10.87
	04/18/2002		11.07	10.52
	05/10/2002		11.24	10.35
	06/04/2002		11.07	10.52
	07/10/2002		11.26	10.33
	08/15/2002		11.34	10.25

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ33	09/11/2002	21.59	11.21	10.38
	10/08/2002		11.25	10.34
	11/07/2002		11.38	10.21
	12/12/2002		11.32	10.27
	01/13/2003		10.29	11.30
	02/26/2003		10.45	11.14
	03/19/2003		10.71	10.88
	04/14/2003		10.69	10.90
	05/13/2003		10.86	10.73
	06/13/2003		11.20	10.39
	07/07/2003		11.23	10.36
	08/13/2003		11.37	10.22
	09/17/2003		11.38	10.21
	10/27/2003		11.55	10.04
	11/18/2003		11.38	10.21
	12/19/2003		10.80	10.79
	01/15/2004		10.55	11.04
	02/17/2004		10.45	11.14
	03/18/2004		10.81	10.78
	04/21/2004		11.12	10.47
	05/18/2004		11.28	10.31
	06/10/2004		11.24	10.35
	07/13/2004		11.34	10.25
	08/12/2004		11.40	10.19
	09/16/2004		11.51	10.08
	10/12/2004		11.40	10.19
	11/17/2004		10.86	10.73
	12/15/2004		10.60	10.99
	01/25/2005		10.40	11.19
	02/15/2005		10.87	10.72
	03/15/2005		10.45	11.14
	04/25/2005		10.56	11.03
	05/20/2005		10.87	10.72
	06/21/2005		11.04	10.55
	07/20/2005		11.30	10.29
	08/22/2005		11.49	10.10
	09/16/2005		11.55	10.04
	10/21/2005		11.69	9.90
	11/18/2005		11.41	10.18
	12/16/2005		11.12	10.47
	01/20/2006		10.25	11.34
	02/22/2006		10.54	11.05
	03/30/2006		9.46	12.13
	04/27/2006		10.13	11.46
	05/18/2006		10.65	10.94

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ33	06/22/2006	21.59	10.93	10.66
	07/20/2006		10.98	10.61
	08/17/2006		11.05	10.54
	09/14/2006		11.00	10.59
	10/19/2006		11.05	10.54
	11/21/2006		10.94	10.65
	12/21/2006		10.50	11.09
	01/18/2007		10.95	10.64
	02/06/2007		11.08	10.51
	03/08/2007		10.43	11.16
	04/12/2007		10.88	10.71
	05/10/2007		10.68	10.91
	06/07/2007		11.00	10.59
	07/19/2007		11.11	10.48
	08/09/2007		11.18	10.41
	08/17/2007		11.06	10.53
	08/24/2007		11.10	10.49
	08/30/2007		11.10	10.49
	09/06/2007		11.13	10.46
	09/14/2007		10.95	10.64
	09/21/2007		10.77	10.82
	09/28/2007		10.85	10.74
	10/05/2007		10.94	10.65
	10/12/2007		10.82	10.77
	10/19/2007		10.57	11.02
	10/26/2007		10.63	10.96
	11/02/2007		10.75	10.84
	11/09/2007		10.80	10.79
	11/15/2007		10.55	11.04
	11/21/2007		10.65	10.94
	11/29/2007		10.75	10.84
	12/14/2007		10.59	11.00
	01/17/2008		10.28	11.31
	02/21/2008		10.27	11.32
	03/20/2008		10.84	10.75
	04/10/2008		11.13	10.46
	05/08/2008		11.16	10.43
	06/12/2008		11.15	10.44
	07/24/2008		11.41	10.18
	08/14/2008		11.38	10.21
	09/18/2008		11.32	10.27
	10/22/2008		11.41	10.18
	11/13/2008		10.96	10.63
	12/04/2008		11.03	10.56
	01/08/2009		10.68	10.91

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ33	02/11/2009	21.59	10.68	10.91
	03/12/2009		9.70	11.89
	04/09/2009		10.43	11.16
	05/20/2009		10.56	11.03
	06/17/2009		10.82	10.77
	07/16/2009		10.94	10.65
	08/13/2009		10.92	10.67
	09/10/2009		11.10	10.49
	10/16/2009		10.63	10.94
	11/12/2009		10.67	10.92
	12/03/2009		10.90	10.69
	01/14/2010		10.74	10.85
	02/18/2010		10.05	11.54
	03/25/2010		10.28	11.31
	04/23/2010		10.20	11.39
	05/21/2010		10.56	11.03
	06/10/2010		10.74	10.85
	07/23/2010		10.84	10.75
	08/12/2010		10.94	10.65
	09/10/2010		11.24	10.35
	10/15/2010		11.17	10.41
	11/04/2010		10.87	10.72
	12/03/2010		10.57	11.02
	01/28/2011		10.44	11.15
	02/10/2011		10.61	10.98
	03/31/2011		9.27	12.32
	04/19/2011		10.31	11.28
LF-PZ34	01/17/2000	21.45	12.74	8.71
	04/25/2000		10.93	10.52
	05/30/2000		11.98	9.47
	06/26/2000		12.37	9.08
	08/10/2000		12.50	8.95
	08/31/2000		12.27	9.18
	09/25/2000		12.32	9.13
	10/06/2000		12.41	9.04
	11/21/2000		12.24	9.21
	12/18/2000		12.10	9.35
	01/15/2001		12.29	9.16
	02/14/2001		11.87	9.58
	03/01/2001		9.95	11.50
	04/19/2001		11.40	10.05
	05/23/2001		12.15	9.30
	06/14/2001		11.81	9.64
	07/02/2001		11.95	9.50
	08/10/2001		11.96	9.49

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ34	09/07/2001	21.45	11.40	10.05
	10/18/2001		11.81	9.64
	11/02/2001		11.15	10.30
	12/14/2001		9.95	11.50
	01/18/2002		9.85	11.60
	02/21/2002		11.03	10.42
	03/25/2002		11.09	10.36
	04/18/2002		11.39	10.06
	05/10/2002		11.65	9.80
	06/04/2002		11.31	10.14
	07/10/2002		11.45	10.00
	08/15/2002		11.57	9.88
	09/11/2002		11.55	9.90
	10/08/2002		11.41	10.04
	11/07/2002		11.86	9.59
	12/12/2002		11.93	9.52
	01/13/2003		10.95	10.50
	02/26/2003		11.22	10.23
	03/19/2003		11.15	10.30
	04/14/2003		11.20	10.25
	05/13/2003		11.91	9.54
	06/13/2003		12.22	9.23
	07/07/2003		12.33	9.12
	08/13/2003		12.51	8.94
	09/17/2003		12.31	9.14
	10/27/2003		12.65	8.80
	11/18/2003		12.51	8.94
	12/19/2003		11.49	9.96
	01/15/2004		11.57	9.88
	02/17/2004		11.61	9.84
	03/18/2004		11.64	9.81
	04/21/2004		11.99	9.46
	05/18/2004		12.02	9.43
	06/10/2004		12.15	9.30
	07/13/2004		12.30	9.15
	08/12/2004		12.25	9.20
	09/16/2004		12.41	9.04
	10/12/2004		12.09	9.36
	11/17/2004		11.05	10.40
	12/15/2004		11.01	10.44
	01/25/2005		10.61	10.84
	02/15/2005		11.52	9.93
	03/15/2005		10.05	11.40
	04/25/2005		11.16	10.29
	05/20/2005		11.59	9.86

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ34	06/21/2005	21.45	11.55	9.90
	07/20/2005		11.97	9.48
	08/22/2005		12.13	9.32
	09/16/2005		12.22	9.23
	10/21/2005		12.32	9.13
	11/18/2005		11.91	9.54
	12/16/2005		11.41	10.04
	01/20/2006		9.61	11.84
	02/22/2006		10.88	10.57
	03/30/2006		9.18	12.27
	04/27/2006		10.50	10.95
	05/18/2006		11.32	10.13
	06/22/2006		11.63	9.82
	07/20/2006		11.72	9.73
	08/17/2006		11.76	9.69
	09/14/2006		11.69	9.76
	10/19/2006		11.60	9.85
	11/21/2006		11.36	10.09
	12/21/2006		10.85	10.60
	01/18/2007		11.41	10.04
	02/06/2007		11.56	9.89
	03/08/2007		10.42	11.03
	04/12/2007		11.07	10.38
	05/10/2007		10.81	10.64
	06/07/2007		11.31	10.14
	07/19/2007		11.68	9.77
	08/09/2007		11.77	9.68
	08/17/2007		11.59	9.86
	08/24/2007		11.54	9.91
	08/30/2007		11.51	9.94
	09/06/2007		11.44	10.01
	09/14/2007		11.35	10.10
	09/21/2007		11.16	10.29
	09/28/2007		11.10	10.35
	10/05/2007		11.13	10.32
	10/12/2007		10.97	10.48
	10/19/2007		10.65	10.80
	10/26/2007		10.61	10.84
	11/02/2007		10.70	10.75
	11/09/2007		10.78	10.67
	11/15/2007		10.48	10.97
	11/21/2007		10.57	10.88
	11/29/2007		10.64	10.81
	12/14/2007		10.73	10.72
	01/17/2008		10.20	11.25

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ34	02/21/2008	21.45	10.20	11.25
	03/20/2008		11.12	10.33
	04/10/2008		11.44	10.01
	05/08/2008		11.51	9.94
	06/12/2008		11.55	9.90
	07/24/2008		11.96	9.49
	08/14/2008		11.93	9.52
	09/18/2008		12.03	9.42
	10/22/2008		12.00	9.45
	11/13/2008		11.60	9.85
	12/04/2008		11.53	9.92
	01/08/2009		10.94	10.51
	02/11/2009		11.13	10.32
	03/12/2009		9.31	12.14
	04/09/2009		10.69	10.76
	05/20/2009		10.71	10.74
	06/17/2009		11.16	10.29
	07/16/2009		11.39	10.06
	08/13/2009		11.48	9.97
	09/10/2009		11.66	9.79
	10/16/2009		11.32	10.11
	11/12/2009		11.14	10.31
	12/03/2009		11.48	9.97
	01/14/2010		11.24	10.21
	02/18/2010		10.05	11.40
	03/25/2010		10.50	10.95
	04/23/2010		10.36	11.09
	05/21/2010		10.97	10.48
	06/10/2010		11.13	10.32
	07/23/2010		11.33	10.12
	08/12/2010		11.32	10.13
	09/10/2010		11.83	9.62
	10/15/2010		11.79	9.65
	11/04/2010		11.57	9.88
	12/03/2010		10.94	10.51
	01/28/2011		10.40	11.05
	02/10/2011		10.80	10.65
	03/31/2011		8.59	12.86
	04/19/2011		10.45	11.00
LF-PZ4	12/15/1997	21.69	10.98	10.71
	01/13/1998		10.57	11.12
	01/30/1998		10.50	11.19
	02/24/1998		10.05	11.64
	04/06/1998		10.94	10.75
	07/02/1998		11.65	10.04

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ4	07/13/1998	21.69	11.74	9.95
	09/28/1998		12.01	9.68
	10/16/1998		12.11	9.58
	01/08/1999		11.82	9.87
	04/16/1999		11.17	10.52
	06/21/1999		12.11	9.58
	07/12/1999		12.28	9.41
	10/08/1999		12.40	9.29
LF-PZ5	12/15/1997	21.45	10.28	11.17
	01/13/1998		10.04	11.41
	01/30/1998		9.44	12.01
	02/24/1998		8.72	12.73
	04/06/1998		10.45	11.00
	07/02/1998		11.50	9.95
	07/13/1998		11.60	9.85
	09/28/1998		11.83	9.62
	10/16/1998		11.95	9.50
	01/08/1999		11.81	9.64
	04/16/1999		11.35	10.10
	06/21/1999		12.50	8.95
	07/12/1999		12.42	9.03
	10/08/1999		12.81	8.64
LF-PZ6	12/15/1997	21.14	9.81	11.33
	01/13/1998		9.13	12.01
	01/30/1998		8.97	12.17
	02/24/1998		8.32	12.82
	04/06/1998		10.08	11.06
	07/02/1998		11.51	9.63
	07/13/1998		11.67	9.47
	09/28/1998		11.78	9.36
	10/16/1998		12.00	9.14
	01/08/1999		11.50	9.64
	04/16/1999		11.19	9.95
	06/21/1999		12.35	8.79
	07/12/1999		12.31	8.83
	10/08/1999		12.70	8.44
	01/17/2000		12.04	9.10
	04/25/2000		10.49	10.65
	05/30/2000		11.54	9.60
	06/26/2000		NM	NM
	08/10/2000		12.15	8.99
	10/06/2000		12.07	9.07
	01/15/2001		11.41	9.73
	04/19/2001		11.03	10.11
	07/02/2001		11.80	9.34

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ6	09/07/2001	21.14	NM	NM
	10/18/2001		11.56	9.58
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		9.80	11.34
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		11.26	9.88
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		11.14	10.00
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		11.11	10.03
	01/13/2003		10.36	10.78
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		9.53	11.61
	07/07/2003		11.85	9.29
	10/27/2003		NM	NM
	11/18/2003		11.64	9.50
	01/15/2004		10.96	10.18
	04/21/2004		11.40	9.74
	07/13/2004		11.84	9.30
	10/12/2004		11.43	9.71
	01/25/2005		10.46	10.68
	04/25/2005		10.85	10.29
	07/20/2005		11.67	9.47
	10/21/2005		12.04	9.10
	01/20/2006		9.12	12.02
	04/27/2006		10.54	10.60
	07/20/2006		11.44	9.70
	10/19/2006		11.11	10.03
	01/18/2007		11.06	10.08
	04/12/2007		11.13	10.01
	07/19/2007		11.54	9.60
	10/05/2007		10.75	10.39
	10/12/2007		10.38	10.76
	10/26/2007		10.25	10.89
	11/02/2007		10.36	10.78
	01/17/2008		10.06	11.08
	04/10/2008		11.28	9.86
	07/24/2008		11.77	9.37
	10/22/2008		11.56	9.58
	01/08/2009		10.47	10.67

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ6	04/09/2009	21.14	10.72	10.42
	07/16/2009		11.24	9.90
	10/16/2009		10.34	10.78
	01/14/2010		10.94	10.20
	04/23/2010		10.15	10.99
	07/23/2010		11.07	10.07
	10/15/2010		11.45	9.68
	01/28/2011		10.44	10.70
	04/19/2011		NM	NM
LF-PZ7	12/15/1997	21.74	10.01	11.74
	01/13/1998		9.51	12.24
	01/30/1998		9.78	11.97
	02/24/1998		9.62	12.13
	04/06/1998		10.21	11.54
	07/02/1998		10.89	10.86
	07/13/1998		10.92	10.82
	09/28/1998		11.07	10.67
	10/16/1998		11.25	10.49
	01/08/1999		10.99	10.75
	04/16/1999		10.29	11.45
	06/21/1999		11.09	10.65
	07/12/1999		11.18	10.56
	10/08/1999		11.17	10.57
	01/17/2000		10.69	11.05
	04/25/2000		10.40	11.34
	05/30/2000		10.64	11.10
	06/26/2000		NM	NM
	08/10/2000		11.11	10.63
	10/06/2000		11.09	10.65
	01/15/2001		10.27	11.47
	04/19/2001		10.60	11.14
	07/02/2001		10.85	10.89
	09/07/2001		NM	NM
	10/18/2001		10.72	11.02
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		10.10	11.64
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		10.49	11.25
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		10.74	11.00
	08/15/2002		NM	NM
	09/11/2002		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ7	10/08/2002	21.74	10.76	10.98
	01/13/2003		9.86	11.88
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		9.92	11.82
	07/07/2003		10.62	11.12
	10/27/2003		NM	NM
	11/18/2003		10.49	11.25
	01/15/2004		10.05	11.69
	04/21/2004		10.34	11.40
	07/13/2004		10.71	11.03
	10/12/2004		10.75	10.99
	01/25/2005		10.20	11.54
	04/25/2005		10.05	11.69
	07/20/2005		10.69	11.05
	10/21/2005		11.00	10.74
	01/20/2006		10.04	11.70
	04/27/2006		5.51	16.23
	07/20/2006		10.57	11.17
	10/19/2006		10.70	11.04
	01/18/2007		10.50	11.24
	04/12/2007		10.42	11.32
	07/19/2007		10.75	10.99
	08/17/2007		10.79	10.95
	08/24/2007		10.73	11.01
	08/30/2007		10.75	10.99
	09/06/2007		10.55	11.19
	09/14/2007		10.43	11.31
	09/21/2007		10.34	11.40
	09/28/2007		10.55	11.19
	10/05/2007		10.67	11.07
	10/12/2007		10.23	11.51
	10/19/2007		10.28	11.46
	10/26/2007		10.39	11.35
	11/02/2007		10.52	11.22
	11/09/2007		10.59	11.15
	11/15/2007		10.28	11.46
	11/21/2007		10.37	11.37
	11/29/2007		10.55	11.19
	01/17/2008		10.12	11.62
	04/10/2008		10.65	11.09
	07/24/2008		11.03	10.71
	10/22/2008		10.96	10.78
	01/08/2009		10.20	11.54
	04/09/2009		10.17	11.57

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ7	07/16/2009	21.74	10.72	11.02
	10/16/2009		9.97	11.75
	01/14/2010		10.21	11.53
	04/23/2010		9.98	11.76
	07/23/2010		10.55	11.19
	10/15/2010		10.80	10.93
	01/28/2011		10.28	11.46
	04/19/2011		10.22	11.52
LF-PZ8	12/15/1997	19.73	8.35	11.38
	01/13/1998		7.23	12.50
	01/30/1998		7.46	12.27
	02/24/1998		6.90	12.83
	04/06/1998		8.94	10.79
	07/02/1998		10.74	8.99
	07/13/1998		10.91	8.82
	09/28/1998		11.14	8.59
	10/16/1998		11.29	8.44
	01/08/1999		10.72	9.01
	04/16/1999		10.03	9.70
	06/21/1999		11.71	8.02
	07/12/1999		11.83	7.90
	10/08/1999		12.07	7.66
	01/17/2000		11.34	8.39
	04/25/2000		9.25	10.48
	05/30/2000		10.59	9.14
	06/26/2000		NM	NM
	08/10/2000		11.44	8.29
	10/06/2000		11.27	8.46
	01/15/2001		9.78	9.95
	04/19/2001		9.81	9.92
	07/02/2001		11.33	8.40
	09/07/2001		NM	NM
	10/18/2001		10.86	8.87
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		8.83	10.90
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		11.02	8.71
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		10.97	8.76
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		10.48	9.25

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ8	01/13/2003	19.73	9.03	10.70
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		8.95	10.78
	07/07/2003		11.37	8.36
	10/27/2003		NM	NM
	11/18/2003		10.53	9.20
	01/15/2004		10.00	9.73
	04/21/2004		11.01	8.72
	07/13/2004		11.42	8.31
	10/12/2004		10.62	9.11
	01/25/2005		9.21	10.52
	03/15/2005		4.89	14.84
	04/25/2005		9.80	9.93
	07/20/2005		11.20	8.53
	10/21/2005		11.55	8.18
	01/20/2006		7.62	12.11
	04/27/2006		9.78	9.95
	07/20/2006		10.91	8.82
	10/19/2006		10.25	9.48
	01/18/2007		10.03	9.70
	04/12/2007		10.59	9.14
	07/19/2007		11.15	8.58
	10/12/2007		8.91	10.82
	10/26/2007		9.04	10.69
	11/02/2007		9.19	10.54
	01/17/2008		8.96	10.77
	04/10/2008		10.71	9.02
	07/24/2008		11.36	8.37
	10/22/2008		11.16	8.57
	01/08/2009		9.41	10.32
	04/09/2009		9.69	10.04
	07/16/2009		10.85	8.88
	10/16/2009		8.93	10.78
	01/14/2010		9.89	9.84
	04/23/2010		8.89	10.84
	07/23/2010		10.50	9.23
	10/15/2010		11.03	8.69
	01/28/2011		9.28	10.45
	04/19/2011		9.65	10.08
LF-PZ9	12/15/1997	15.46	3.91	11.55
	01/13/1998		2.66	12.80
	01/30/1998		3.09	12.37
	02/24/1998		2.64	12.82
	04/06/1998		4.41	11.05

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ9	07/02/1998	15.46	6.34	9.12
	07/13/1998		6.46	9.00
	09/28/1998		6.62	8.84
	10/16/1998		6.75	8.71
	01/08/1999		6.93	8.53
	04/16/1999		6.29	9.17
	06/21/1999		7.90	7.56
	07/12/1999		8.04	7.42
	10/08/1999		7.89	7.57
	01/17/2000		6.78	8.68
	04/25/2000		4.98	10.48
	05/30/2000		6.23	9.23
	06/26/2000		NM	NM
	08/10/2000		6.88	8.58
	10/06/2000		6.54	8.92
	01/15/2001		5.00	10.46
	04/19/2001		5.75	9.71
	07/02/2001		6.61	8.85
	09/07/2001		NM	NM
	10/18/2001		6.20	9.26
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		5.31	10.15
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		7.17	8.29
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		7.14	8.32
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		6.02	9.44
	01/13/2003		4.71	10.75
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		4.75	10.71
	07/07/2003		6.55	8.91
	10/27/2003		NM	NM
	11/18/2003		6.19	9.27
	01/15/2004		5.70	9.76
	04/21/2004		6.79	8.67
	07/13/2004		7.03	8.43
	10/12/2004		7.05	8.41
	01/25/2005		5.25	10.21
	04/25/2005		5.10	10.36

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
LF-PZ9	07/20/2005	15.46	7.15	8.31
	10/21/2005		7.26	8.20
	01/20/2006		3.29	12.17
	04/27/2006		6.05	9.41
	07/20/2006		6.20	9.26
	10/19/2006		5.78	9.68
	01/18/2007		5.66	9.80
	04/12/2007		6.58	8.88
	07/19/2007		6.32	9.14
	08/17/2007		6.56	8.90
	08/24/2007		6.21	9.25
	08/30/2007		6.04	9.42
	09/06/2007		5.99	9.47
	09/14/2007		5.84	9.62
	09/21/2007		5.57	9.89
	09/28/2007		5.52	9.94
	10/05/2007		5.62	9.84
	10/12/2007		4.82	10.64
	10/19/2007		4.71	10.75
	10/26/2007		4.99	10.47
	11/02/2007		5.08	10.38
	11/09/2007		5.12	10.34
	11/15/2007		4.46	11.00
	11/21/2007		4.47	10.99
	11/29/2007		4.66	10.80
	01/17/2008		5.10	10.36
	04/10/2008		6.34	9.12
	07/24/2008		7.24	8.22
	10/22/2008		6.47	8.99
	01/08/2009		5.11	10.35
	04/09/2009		5.35	10.11
	07/16/2009		6.40	9.06
	10/16/2009		4.27	11.17
	01/14/2010		5.02	10.44
	04/23/2010		4.41	11.05
	07/23/2010		6.53	8.93
	10/15/2010		6.66	8.79
	01/28/2011		4.65	10.81
	04/19/2011		5.32	10.14
MD-1	05/05/2003 (e)	13.60	6.90	6.70
	10/14/2003 (e)		6.60	7.00
	01/20/2004 (e)		6.10	7.50
	04/27/2004 (e)		6.12	7.48
	10/22/2004 (e)		7.28	6.32
	09/30/2005 (e)		6.94	6.66

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MD-1	04/15/2006 (e)	13.60	5.62	7.98
	10/26/2006 (e)		5.99	7.61
	04/12/2007 (e)		5.34	8.26
	04/12/2007 (f)		5.34	8.26
	10/12/2007 (e)		5.41	8.19
	04/22/2008 (e)		6.21	7.39
	10/22/2008 (e)		6.30	7.30
	04/24/2009 (e)		5.89	7.71
	10/21/2009 (e)		5.56	8.04
	04/29/2010 (e)		5.70	7.90
	10/27/2010 (e)		5.30	8.30
	11/14/2011 (e)		5.13	8.47
	10/17/2012 (e)		5.41	8.19
	10/08/2013 (e)		5.79	7.81
	10/27/2014 (e)		5.80	7.80
MD-2	05/05/2003 (e)	11.32	5.01	6.31
	10/14/2003 (e)		6.26	5.06
	01/20/2004 (e)		5.68	5.64
	04/27/2004 (e)		6.14	5.18
	10/22/2004 (e)		6.43	4.89
	09/30/2005 (e)		6.28	5.04
	04/15/2006 (e)		5.68	5.64
	10/26/2006 (e)		6.22	5.10
	04/12/2007 (e)		6.36	4.96
	04/12/2007 (f)		6.36	4.96
	10/12/2007 (e)		6.16	5.16
	04/22/2008 (e)		6.40	4.92
	10/22/2008 (e)		6.78	4.54
	04/24/2009 (e)		6.42	4.90
	10/21/2009 (e)		6.27	5.05
	04/29/2010 (e)		6.02	5.30
	10/27/2010 (e)		6.20	5.12
	11/14/2011 (e)		6.54	4.78
	10/17/2012 (e)		6.85	4.47
	10/07/2013 (e)		6.68	4.64
	10/27/2014 (e)		6.80	4.52
MD-3	05/05/2003 (e)	12.68	7.14	5.54
	10/14/2003 (e)		7.54	5.14
	01/20/2004 (e)		6.80	5.88
	04/27/2004 (e)		7.34	5.34
	10/22/2004 (e)		7.90	4.78
	09/30/2005 (e)		7.85	4.83
	04/15/2006 (e)		6.58	6.10
	10/26/2006 (e)		7.40	5.28
	04/12/2007 (e)		7.36	5.32

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MD-3	04/12/2007 (f)	12.68	7.36	5.32
	10/12/2007 (e)		7.30	5.38
	04/22/2008 (e)		7.35	5.33
	10/22/2008 (e)		7.82	4.86
	04/24/2009 (e)		7.02	5.66
	10/21/2009 (e)		7.13	5.55
	04/29/2010 (e)		6.64	6.04
	10/27/2010 (e)		7.25	5.43
	11/14/2011 (e)		7.69	4.99
	10/17/2012 (e)		8.05	4.63
	10/07/2013 (e)		7.76	4.92
	10/27/2014 (e)		7.60	5.08
MD-4	05/05/2003 (e)	11.75	7.03	4.72
	10/14/2003 (e)		3.58	8.17
	01/20/2004 (e)		2.85	8.90
	04/27/2004 (e)		3.17	8.58
	10/22/2004 (e)		2.59	9.16
	09/30/2005 (e)		3.62	8.13
	04/15/2006 (e)		2.28	9.47
	10/26/2006 (e)		3.72	8.03
	04/12/2007 (e)		3.22	8.53
	04/12/2007 (f)		3.22	8.53
	10/12/2007 (e)		2.76	8.99
	04/22/2008 (e)		3.60	8.15
	10/22/2008 (e)		3.42	8.33
	04/24/2009 (e)		3.03	8.72
	10/21/2009 (e)		2.71	9.04
	04/29/2010 (e)		2.66	9.09
	10/27/2010 (e)		2.90	8.85
	11/14/2011 (e)		4.52	7.23
	10/17/2012 (e)		4.01	7.74
	10/08/2013 (e)		4.12	7.63
	10/27/2014 (e)		3.94	7.81
MD-5	05/05/2003 (f)	12.03	4.97	7.06
	10/14/2003 (f)		5.99	6.04
	01/20/2004 (f)		5.08	6.95
	04/20/2004 (f)		10.58	1.45
	10/21/2004 (f)		4.90	7.13
	03/28/2005 (f)		4.54	7.49
	09/21/2005 (f)		5.80	6.23
	09/30/2005 (e)		5.89	6.14
	04/13/2006 (f)		4.31	7.72
	04/15/2006 (e)		4.29	7.74
	10/26/2006 (e)		5.69	6.34
	10/26/2006 (f)		5.69	6.34

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MD-5	04/12/2007 (e)	12.03	5.62	6.41
	04/12/2007 (f)		5.62	6.41
	10/12/2007 (e)		5.30	6.73
	10/12/2007 (f)		5.30	6.73
	04/10/2008 (f)		5.92	6.11
	04/22/2008 (e)		6.01	6.02
	04/22/2008 (f)		6.01	6.02
	10/22/2008 (e)		6.23	5.80
	10/22/2008 (f)		6.30	5.73
	04/09/2009 (f)		5.48	6.55
	04/24/2009 (e)		5.70	6.33
	10/16/2009 (f)		4.98	7.03
	04/29/2010 (e)		5.31	6.72
	10/15/2010 (f)		6.10	5.93
	10/27/2010 (f)		5.67	6.36
	04/19/2011 (f)		5.56	6.47
	11/14/2011 (f)		6.43	5.60
	06/11/2012		6.30	5.73
	07/18/2012		6.29	5.74
	08/15/2012		6.40	5.63
	09/13/2012		6.49	5.54
	10/17/2012		6.43	5.60
	11/16/2012		5.88	6.15
	12/14/2012		5.41	6.62
	01/18/2013		5.92	6.11
	02/22/2013		5.84	6.19
	03/21/2013		6.00	6.03
	04/19/2013		6.21	5.82
	07/16/2013		6.27	5.76
	10/07/2013 (f)		6.54	5.49
	01/03/2014		5.93	6.10
	04/22/2014		5.95	6.08
	07/08/2014		6.16	5.87
	10/28/2014		6.55	5.48
MW-1	01/09/1995	16.48	5.14	11.35
	01/27/1995		4.78	11.71
	02/17/1995		6.73	9.76
	04/13/1995		6.63	9.86
	06/08/1995		6.98	9.51
	08/09/1995		7.50	8.99
	11/17/1995		8.00	8.49
	01/09/1996		7.19	9.29
	04/24/1996		6.93	9.55
	07/29/1996		7.76	8.72
	12/13/1996		5.19	11.29

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-1	04/15/1997	16.48	7.34	9.14
	09/19/1997		7.56	8.92
	12/03/1997		6.50	9.98
	12/15/1997		6.47	10.01
	01/13/1998		5.80	10.68
	01/30/1998		5.90	10.58
	02/24/1998		5.24	11.24
	04/06/1998		6.37	10.11
	07/02/1998		7.11	9.37
	07/13/1998		7.19	9.29
	09/28/1998		7.44	9.04
	10/16/1998		7.53	8.95
	01/08/1999		7.30	9.18
	04/16/1999		6.34	10.14
	06/21/1999		7.40	9.08
	07/12/1999		7.56	8.92
	10/08/1999		7.72	8.76
	01/17/2000		7.53	8.95
	04/25/2000		6.99	9.49
	05/30/2000		7.23	9.25
	06/26/2000		NM	NM
	08/10/2000		7.68	8.80
	08/31/2000		7.10	9.38
	09/25/2000		7.33	9.15
	10/06/2000		7.40	9.08
	11/21/2000		7.49	8.99
	12/18/2000		7.27	9.21
	01/15/2001		7.09	9.39
	02/14/2001		6.53	9.95
	03/01/2001		6.06	10.42
	04/19/2001		6.95	9.53
	05/23/2001		7.21	9.27
	06/14/2001		7.39	9.09
	07/02/2001		7.38	9.10
	08/10/2001		7.11	9.37
	09/07/2001		7.24	9.24
	10/18/2001		NM	NM
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		NM	NM
	02/21/2002		6.29	10.19
	03/25/2002		6.45	10.03
	04/18/2002		6.89	9.59
	05/10/2002		7.14	9.34
	06/04/2002		6.94	9.54

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-1	07/10/2002	16.48	7.22	9.26
	08/15/2002		9.50	6.98
	09/11/2002		4.02	12.46
	10/08/2002		7.01	9.47
	11/07/2002		7.16	9.32
	12/12/2002		6.93	9.55
	01/13/2003		5.52	10.96
	02/26/2003		5.62	10.86
	03/19/2003		6.31	10.17
	04/14/2003		6.11	10.37
	05/13/2003		6.34	10.14
	07/07/2003		NM	NM
	10/27/2003		NM	NM
	01/15/2004		NM	NM
	04/21/2004		NM	NM
	05/18/2004		NM	NM
	06/10/2004		NM	NM
	07/13/2004		NM	NM
	09/16/2004		NM	NM
	12/15/2004		NM	NM
	01/24/2005		7.28	9.20
	02/15/2005		6.23	10.25
	03/15/2005		6.11	10.37
	04/25/2005		5.99	10.49
	05/20/2005		6.13	10.35
	06/21/2005		6.40	10.08
	08/22/2005		6.42	10.06
	10/21/2005		NM	NM
	01/20/2006		2.30	14.18
	02/22/2006		5.42	11.06
	03/30/2006		4.74	11.74
	04/27/2006		NM	NM
	05/18/2006		5.92	10.56
	06/22/2006		6.26	10.22
	07/20/2006		6.18	10.30
	08/17/2006		6.06	10.42
	09/14/2006		6.22	10.26
	10/19/2006		6.25	10.23
	11/21/2006		NA	NM
	12/21/2006		5.63	10.85
	01/18/2007		6.34	10.14
	02/06/2007		DRY	NM
	03/08/2007		5.82	10.66
	04/12/2007		5.07	11.41
	05/10/2007		5.53	10.95

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-1	06/07/2007	16.48	DRY	NM
	07/19/2007		DRY	NM
	08/09/2007		DRY	NM
	09/14/2007		DRY	NM
	10/12/2007		3.23	13.25
	11/09/2007		6.19	10.29
	12/14/2007		5.94	10.54
	01/17/2008		3.60	12.88
	02/21/2008		0.00	16.48
	03/20/2008		5.47	11.01
	04/10/2008		6.36	10.12
	05/08/2008		DRY	NM
	06/12/2008		DRY	NM
	07/24/2008		DRY(1)	NM
	08/14/2008		DRY(1)	NM
	09/18/2008		DRY(1)	NM
	10/22/2008		DRY(1)	NM
	11/13/2008		3.82(1)	12.66
	12/04/2008		5.43(1)	11.05
	01/08/2009		5.70(1)	NM
	02/11/2009		0.63	15.85
	03/12/2009		2.10	14.38
	04/09/2009		2.83	13.65
	05/20/2009		3.71	12.77
	06/17/2009		5.70	10.78
	07/16/2009		5.90	10.49
	08/13/2009		5.92	10.56
	09/10/2009		6.20	10.28
	10/16/2009		0.50	NM
	11/12/2009		4.96	11.52
	12/03/2009		5.57	10.91
	01/14/2010		2.34	14.14
	02/18/2010		4.28	12.20
	03/25/2010		2.73	13.75
	04/23/2010		0.05	NM
	05/21/2010		3.05	13.43
	06/10/2010		4.30	12.18
	07/23/2010		5.95(1)	10.53
	08/12/2010		DRY	NM
	09/10/2010		6.07	10.41
	10/15/2010		6.25	10.22
	11/04/2010		5.65	10.83
	12/03/2010		4.76	11.72
	01/28/2011		5.50	10.98
	02/10/2011		5.42	11.06

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-1	03/31/2011	16.48	NM	NM
	04/19/2011		5.39	11.09
	03/20/2012		5.84	10.64
MW-2	01/09/1995	16.29	4.93	11.36
	01/27/1995		4.53	11.76
	02/17/1995		6.58	9.71
	04/13/1995		6.46	9.83
	06/08/1995		6.82	9.47
	08/09/1995		7.31	8.78
	11/17/1995		8.12	7.97
	01/09/1996		7.04	9.24
	04/24/1996		6.56	9.72
	07/29/1996		7.59	8.69
	12/13/1996		5.04	11.24
	04/15/1997		7.17	9.11
	09/19/1997		7.41	8.87
	12/03/1997		6.33	9.95
	12/15/1997		6.26	10.02
	01/13/1998		5.47	10.81
	01/30/1998		5.65	10.63
	02/24/1998		5.06	11.22
	04/06/1998		6.17	10.11
	07/02/1998		6.79	9.49
	07/13/1998		7.02	9.26
	09/28/1998		7.27	9.01
	10/16/1998		7.35	8.93
	01/08/1999		7.12	9.16
	04/16/1999		6.32	9.96
	06/21/1999		7.21	9.07
	07/12/1999		7.38	8.90
	10/08/1999		7.55	8.73
	01/17/2000		7.33	8.95
	04/25/2000		6.46	9.82
	05/30/2000		7.01	9.27
	06/26/2000		NM	NM
	08/10/2000		7.45	8.83
	10/06/2000		7.18	9.10
	11/21/2000		7.30	8.98
	12/18/2000		7.09	9.19
	01/15/2001		6.86	9.42
	02/14/2001		6.47	9.81
	03/01/2001		5.77	10.51
	04/19/2001		6.50	9.78
	05/23/2001		6.98	9.31
	06/14/2001		7.19	9.10

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-2	07/02/2001	16.29	7.15	9.14
	08/10/2001		6.89	9.40
	09/07/2001		7.04	9.25
	10/18/2001		7.22	9.07
	11/02/2001		7.22	9.07
	12/14/2001		5.81	10.48
	01/18/2002		6.88	9.41
	02/21/2002		6.22	10.07
	03/25/2002		6.34	9.95
	04/18/2002		6.63	9.66
	05/10/2002		6.93	9.36
	06/04/2002		6.87	9.42
	07/10/2002		7.04	9.25
	08/15/2002		6.95	9.34
	09/11/2002		6.82	9.47
	10/08/2002		6.90	9.39
	11/07/2002		7.02	9.27
	12/12/2002		6.75	9.54
	01/13/2003		5.39	10.90
	02/26/2003		5.35	10.94
	03/19/2003		6.02	10.27
	04/14/2003		6.09	10.20
	05/13/2003		6.19	10.10
	07/07/2003		6.45	9.84
	08/13/2003		6.62	9.67
	09/17/2003		6.66	9.63
	10/27/2003		6.80	9.49
	11/18/2003		6.78	9.51
	12/19/2003		6.40	9.89
	01/15/2004		6.29	10.00
	02/17/2004		5.68	10.61
	03/18/2004		6.31	9.98
	04/21/2004		6.61	9.68
	05/18/2004		6.70	9.59
	06/10/2004		6.65	9.64
	07/13/2004		6.69	9.60
	08/12/2004		6.67	9.62
	09/16/2004		6.90	9.39
	10/12/2004		6.88	9.41
	11/17/2004		6.48	9.81
	12/15/2004		6.21	10.08
	01/24/2005		6.28	10.01
	02/15/2005		6.20	10.09
	03/15/2005		5.71	10.58
	04/25/2005		5.85	10.44

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-2	05/20/2005	16.29	5.58	10.71
	06/21/2005		6.22	10.07
	07/20/2005		6.50	9.79
	08/22/2005		6.72	9.57
	09/16/2005		6.99	9.30
	10/21/2005		7.16	9.13
	11/18/2005		6.96	9.33
	12/16/2005		6.83	9.46
	01/20/2006		5.58	10.71
	02/22/2006		5.71	10.58
	03/30/2006		4.93	11.36
	04/27/2006		5.18	11.11
	05/18/2006		5.59	10.70
	06/22/2006		6.35	9.94
	07/20/2006		6.05	10.24
	08/17/2006		5.49	10.80
	09/14/2006		6.08	10.21
	10/19/2006		6.10	10.19
	11/21/2006		6.25	10.04
	12/21/2006		5.64	10.65
	01/18/2007		6.09	10.20
	02/06/2007		6.21	10.08
	03/08/2007		5.92	10.37
	04/12/2007		NM	NM
	05/10/2007		5.95	10.34
	06/07/2007		6.15	10.14
	07/19/2007		6.27	10.02
	08/09/2007		6.26	10.03
	09/14/2007		6.28	10.01
	10/12/2007		5.86	10.43
	11/09/2007		5.88	10.41
	12/14/2007		5.82	10.47
	01/17/2008		5.68	10.61
	02/21/2008		5.55	10.74
	03/20/2008		5.95	10.34
	04/10/2008		6.32	9.97
	05/08/2008		6.45	9.84
	06/12/2008		6.21	10.08
	07/24/2008		6.47	9.82
	08/14/2008		6.41	9.88
	09/18/2008		6.31	9.98
	10/22/2008		6.58	9.71
	11/13/2008		6.22	10.07
	12/04/2008		6.21	10.08
	01/08/2009		5.98	10.31

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-2	02/11/2009	16.29	5.89	10.40
	03/12/2009		5.05	11.24
	04/09/2009		5.55	10.74
	05/20/2009		5.88	10.41
	06/17/2009		5.91	10.38
	07/16/2009		5.89	10.40
	08/13/2009		5.79	10.50
	09/10/2009		6.07	10.22
	10/16/2009		5.29	10.98
	11/12/2009		5.62	10.67
	12/03/2009		5.85	10.44
	01/14/2010		5.79	10.50
	02/18/2010		5.35	10.94
	03/25/2010		5.45	10.84
	04/23/2010		5.31	10.98
	05/21/2010		5.74	10.55
	06/10/2010		5.84	10.45
	07/23/2010		5.79	10.50
	08/12/2010		6.13	10.16
	09/10/2010		6.00	10.29
	10/15/2010		6.27	10.01
	11/04/2010		6.02	10.27
	12/03/2010		5.86	10.43
	01/28/2011		5.57	10.72
	02/10/2011		5.68	10.61
	03/31/2011		4.64	11.65
	04/19/2011		2.71	13.58
	03/20/2012		NM	NM
MW-3	01/09/1995	17.30	5.38	11.96
	01/27/1995		4.66	12.68
	02/17/1995		7.01	10.33
	04/13/1995		6.93	10.41
	06/08/1995		7.39	9.95
	08/09/1995		7.89	9.45
	11/17/1995		8.40	8.94
	01/09/1996		7.48	9.82
	04/24/1996		7.19	10.11
	07/29/1996		8.08	9.22
	12/13/1996		5.33	11.97
	04/15/1997		7.70	9.60
	09/19/1997		7.93	9.37
	12/03/1997		6.77	10.53
	12/15/1997		6.81	10.49
	01/13/1998		6.19	11.11
	01/30/1998		6.29	11.01

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-3	02/24/1998	17.30	5.61	11.69
	04/06/1998		6.76	10.54
	07/02/1998		7.49	9.81
	07/13/1998		7.60	9.70
	09/28/1998		7.87	9.43
	10/16/1998		7.96	9.34
	01/08/1999		7.71	9.59
	04/16/1999		6.79	10.51
	06/21/1999		7.89	9.41
	07/12/1999		8.06	9.24
	10/08/1999		8.18	9.12
	01/17/2000		7.91	9.39
	04/25/2000		7.35	9.95
	05/30/2000		7.66	9.64
	06/26/2000		7.94	9.36
	08/10/2000		8.19	9.11
	08/31/2000		7.72	9.58
	09/25/2000		7.91	9.39
	10/06/2000		7.95	9.35
	11/21/2000		7.89	9.41
	12/18/2000		7.75	9.55
	01/15/2001		7.53	9.77
	02/14/2001		6.95	10.35
	03/01/2001		6.46	10.84
	04/19/2001		7.42	9.88
	05/23/2001		7.79	9.51
	06/14/2001		7.86	9.44
	07/02/2001		7.87	9.43
	08/10/2001		7.60	9.70
	09/07/2001		7.68	9.62
	10/18/2001		7.87	9.43
	11/02/2001		7.85	9.45
	12/14/2001		6.41	10.89
	01/18/2002		6.65	10.65
	02/21/2002		6.77	10.53
	03/25/2002		6.94	10.36
	04/18/2002		7.41	9.89
	05/10/2002		7.83	9.47
	06/04/2002		7.41	9.89
	07/10/2002		7.87	9.43
	08/15/2002		8.62	8.68
	09/11/2002		7.43	9.87
	10/08/2002		7.54	9.76
	11/07/2002		7.58	9.72
	12/12/2002		7.44	9.86

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-3	01/13/2003	17.30	5.97	11.33
	02/26/2003		6.14	11.16
	03/19/2003		6.99	10.31
	04/14/2003		6.70	10.60
	05/13/2003		6.82	10.48
	06/13/2003		7.21	10.09
	07/07/2003		7.25	10.05
	08/13/2003		7.43	9.87
	09/17/2003		7.45	9.85
	10/27/2003		7.62	9.68
	11/18/2003		7.43	9.87
	12/19/2003		6.80	10.50
	01/15/2004		6.58	10.72
	02/17/2004		6.41	10.89
	03/18/2004		6.96	10.34
	04/21/2004		7.32	9.98
	05/18/2004		7.43	9.87
	06/10/2004		7.35	9.95
	07/13/2004		7.40	9.90
	08/12/2004		7.45	9.85
	09/16/2004		7.60	9.70
	10/12/2004		7.52	9.78
	11/17/2004		7.10	10.20
	12/15/2004		6.75	10.55
	01/24/2005		6.63	10.67
	02/15/2005		6.65	10.65
	03/15/2005		6.70	10.60
	04/25/2005		6.64	10.66
	05/20/2005		6.83	10.47
	06/21/2005		7.16	10.14
	07/20/2005		7.48	9.82
	08/22/2005		7.69	9.61
	09/16/2005		7.72	9.58
	10/21/2005		7.87	9.43
	11/18/2005		7.67	9.63
	12/16/2005		7.32	9.98
	01/20/2006		6.33	10.97
	02/22/2006		5.90	11.40
	03/30/2006		5.07	12.23
	04/27/2006		5.75	11.55
	05/18/2006		6.34	10.96
	06/22/2006		6.65	10.65
	07/20/2006		6.60	10.70
	08/17/2006		6.50	10.80
	09/14/2006		6.62	10.68

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-3	10/19/2006	17.30	6.64	10.66
	11/21/2006		6.72	10.58
	12/21/2006		5.97	11.33
	01/18/2007		6.65	10.65
	02/06/2007		6.90	10.40
	03/08/2007		6.25	11.05
	04/12/2007		6.67	10.63
	05/10/2007		6.50	10.80
	06/07/2007		6.84	10.46
	07/19/2007		6.84	10.46
	08/09/2007		7.79	9.51
	09/14/2007		6.71	10.59
	10/12/2007		6.45	10.85
	11/09/2007		6.60	10.70
	12/14/2007		6.39	10.91
	01/17/2008		6.11	11.19
	02/21/2008		5.97	11.33
	03/20/2008		6.69	10.61
	04/10/2008		7.05	10.25
	05/08/2008		7.05	10.25
	06/12/2008		6.90	10.40
	07/24/2008		7.10	10.20
	08/14/2008		7.07	10.23
	09/18/2008		6.93	10.37
	10/22/2008		7.19	10.11
	11/13/2008		6.71	10.59
	12/04/2008		6.85	10.45
	01/08/2009		7.47	9.83
	02/11/2009		6.28	11.02
	03/12/2009		5.36	11.94
	04/09/2009		6.08	11.22
	05/20/2009		6.28	11.02
	06/17/2009		6.48	10.82
	07/16/2009		6.56	10.74
	08/13/2009		6.45	10.85
	09/10/2009		6.73	10.57
	10/16/2009		5.94	11.34
	11/12/2009		6.31	10.99
	12/03/2009		6.50	10.80
	01/14/2010		6.40	10.90
	02/18/2010		5.68	11.62
	03/25/2010		5.85	11.45
	04/23/2010		5.78	11.52
	05/21/2010		6.29	11.01
	06/10/2010		6.50	10.80

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-3	07/23/2010	17.30	6.43	10.87
	08/12/2010		6.60	10.70
	09/10/2010		6.64	10.66
	10/15/2010		6.93	10.36
	11/04/2010		6.62	10.68
	12/03/2010		6.38	10.92
	01/28/2011		6.16	11.14
	02/10/2011		6.35	10.95
	03/31/2011		4.99	12.31
	04/19/2011		6.02	11.28
	06/27/2011		6.52	10.78
	07/21/2011		6.69	10.61
	08/22/2011		7.92	9.38
	09/23/2011		11.10	6.20
	09/30/2011		11.17	6.13
	10/05/2011		11.08	6.22
	10/12/2011		11.35	5.95
	10/19/2011		11.40	5.90
	10/26/2011		11.33	5.97
	11/02/2011		11.48	5.82
	11/09/2011		10.14	7.16
	11/16/2011		9.76	7.54
	11/23/2011		9.43	7.87
	11/30/2011		9.28	8.02
	12/06/2011		9.18	8.12
	01/27/2012		7.89	9.41
	02/23/2012		7.52	9.78
	03/20/2012		6.49	10.81
	04/16/2012		5.31	11.99
	05/14/2012		6.60	10.70
	06/11/2012		6.86	10.44
	07/18/2012		6.95	10.35
	08/15/2012		6.89	10.41
	09/13/2012		6.85	10.45
	10/17/2012		6.97	10.33
	11/16/2012		6.62	10.68
	12/14/2012		5.76	11.54
	01/18/2013		6.28	11.02
	02/22/2013		6.61	10.69
	03/21/2013		6.57	10.73
	04/19/2013		6.31	10.99
	07/16/2013		7.11	10.19
	10/07/2013		7.52	9.78
	01/03/2014		7.32	9.98
	04/22/2014		6.76	10.54

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-3	07/08/2014	17.30	7.42	9.88
	10/28/2014		7.62	9.68
MW-4	01/09/1995	18.26	6.87	11.38
	01/27/1995		6.75	11.50
	02/17/1995		7.24	11.01
	04/13/1995		7.42	10.83
	06/08/1995		7.64	10.61
	08/09/1995		7.93	10.12
	11/17/1995		8.67	9.38
	01/09/1996		8.12	10.11
	04/24/1996		7.72	10.51
	07/29/1996		8.29	9.94
	12/13/1996		6.75	11.48
	04/15/1997		NM	NM
	09/19/1997		7.76	10.47
	12/03/1997		NM	NM
	12/15/1997		7.08	11.15
	01/13/1998		7.28	10.95
	01/30/1998		6.78	11.45
	02/24/1998		6.13	12.10
	04/06/1998		7.13	11.10
	07/02/1998		7.80	10.43
	07/13/1998		7.89	10.37
	09/28/1998		8.29	9.97
	10/16/1998		8.40	9.86
	01/08/1999		7.71	10.55
	04/16/1999		7.42	10.84
	06/21/1999		8.16	10.10
	07/12/1999		8.29	9.97
	10/08/1999		8.79	9.47
	01/17/2000		8.82	9.44
	04/25/2000		7.74	10.52
	05/30/2000		8.05	10.21
	06/26/2000		8.13	10.13
	08/10/2000		8.62	9.64
	08/31/2000		8.59	9.67
	09/25/2000		8.62	9.64
	10/06/2000		8.62	9.64
	11/21/2000		8.55	9.71
	12/18/2000		8.65	9.61
	01/15/2001		8.61	9.65
	02/14/2001		8.30	9.96
	03/01/2001		7.93	10.33
	04/19/2001		8.36	9.90
	05/23/2001		8.27	9.99

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-4	06/14/2001	18.26	8.30	9.96
	07/02/2001		8.39	9.87
	08/10/2001		8.34	9.92
	09/07/2001		8.32	9.94
	10/18/2001		8.56	9.70
	11/02/2001		8.81	9.45
	12/14/2001		7.84	10.42
	01/18/2002		7.09	11.17
	02/21/2002		7.47	10.79
	03/25/2002		7.45	10.81
	04/18/2002		8.01	10.25
	05/10/2002		8.01	10.25
	06/04/2002		7.94	10.32
	07/10/2002		8.26	10.00
	08/15/2002		8.25	10.01
	09/11/2002		8.05	10.21
	10/08/2002		8.04	10.22
	11/07/2002		8.13	10.13
	12/12/2002		8.24	10.02
	01/13/2003		7.42	10.84
	02/26/2003		7.15	11.11
	03/19/2003		7.58	10.68
	04/14/2003		7.62	10.64
	05/13/2003		7.75	10.51
	06/13/2003		8.02	10.24
	07/07/2003		7.96	10.30
	08/13/2003		8.13	10.13
	09/17/2003		8.18	10.08
	10/27/2003		8.44	9.82
	11/18/2003		8.41	9.85
	12/19/2003		8.00	10.26
	01/15/2004		7.36	10.90
	02/17/2004		7.51	10.75
	03/18/2004		7.60	10.66
	04/21/2004		7.83	10.43
	05/18/2004		8.08	10.18
	06/10/2004		8.14	10.12
	07/13/2004		8.22	10.04
	08/12/2004		8.30	9.96
	09/16/2004		8.36	9.90
	10/12/2004		8.33	9.93
	11/17/2004		8.03	10.23
	12/15/2004		7.71	10.55
	01/24/2005		7.28	10.98
	02/15/2005		7.60	10.66

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-4	03/15/2005	18.26	7.41	10.85
	04/25/2005		7.28	10.98
	05/20/2005		7.50	10.76
	06/21/2005		7.44	10.82
	07/20/2005		8.29	9.94
	08/22/2005		8.33	9.90
	09/16/2005		8.37	9.89
	10/21/2005		8.63	9.63
	11/18/2005		8.56	9.70
	12/16/2005		8.11	10.15
	01/20/2006		6.68	11.58
	02/22/2006		7.10	11.16
	03/30/2006		6.42	11.84
	04/27/2006		6.70	11.56
	05/18/2006		7.17	11.09
	06/22/2006		7.50	10.76
	07/20/2006		7.64	10.62
	08/17/2006		7.75	10.51
	09/14/2006		7.77	10.49
	10/19/2006		7.96	10.30
	11/21/2006		9.10	9.16
	12/21/2006		7.54	10.72
	01/18/2007		7.73	10.53
	02/06/2007		7.82	10.44
	03/08/2007		7.19	11.07
	04/12/2007		7.43	10.83
	05/10/2007		7.52	10.74
	06/07/2007		7.59	10.67
	07/19/2007		NM	NM
	08/09/2007		NM	NM
	09/14/2007		7.78	10.48
	10/12/2007		7.49	10.77
	11/09/2007		7.59	10.67
	12/14/2007		7.40	10.86
	01/17/2008		6.94	11.32
	02/21/2008		NM	NM
	03/20/2008		NM	NM
	04/10/2008		7.68	10.58
	05/08/2008		8.03	10.23
	06/12/2008		7.88	10.38
	07/24/2008		8.09	10.17
	08/14/2008		8.19	10.07
	09/18/2008		8.15	10.11
	10/22/2008		8.37	9.89
	11/13/2008		8.06	10.20

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-4	12/04/2008	18.26	8.07	10.19
	01/08/2009		7.83	10.43
	02/11/2009		7.67	10.59
	03/12/2009		7.02	11.24
	04/09/2009		6.79	11.47
	05/20/2009		7.27	10.99
	06/17/2009		7.38	10.88
	07/16/2009		NM	NM
	08/13/2009		7.56	10.70
	09/10/2009		7.80	10.46
	10/16/2009		7.53	10.71
	11/12/2009		7.38	10.88
	12/03/2009		7.51	10.75
	01/14/2010		7.50	10.76
	02/18/2010		6.68	11.58
	03/25/2010		6.72	11.54
	04/23/2010		6.92	11.34
	05/21/2010		7.18	11.08
	06/10/2010		7.30	10.96
	07/23/2010		7.46	10.80
	08/12/2010		7.57	10.69
	09/10/2010		7.78	10.48
	10/15/2010		7.87	10.38
	11/04/2010		7.94	10.32
	12/03/2010		7.46	10.80
	01/28/2011		6.93	11.33
	02/10/2011		7.08	11.18
	03/31/2011		5.91	12.35
	04/19/2011		6.58	11.68
MW-5	01/09/1995	17.97	6.14	11.83
	01/27/1995		5.71	12.26
	02/17/1995		6.59	11.38
	04/13/1995		6.55	11.42
	06/08/1995		7.44	10.53
	08/09/1995		7.87	10.70
	11/17/1995		8.65	9.92
	01/09/1996		7.93	10.01
	04/24/1996		7.49	10.45
	07/29/1996		8.24	9.70
	12/13/1996		6.97	10.97
	04/15/1997		NM	NM
	09/19/1997		8.11	9.83
	12/03/1997		7.68	10.26
	12/15/1997		7.61	10.33
	01/13/1998		7.48	10.46

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-5	01/30/1998	17.97	6.82	11.12
	02/24/1998		5.98	11.96
	04/06/1998		7.16	10.78
	07/02/1998		7.85	10.09
	07/13/1998		7.96	10.01
	09/28/1998		8.37	9.60
	10/16/1998		8.46	9.51
	01/08/1999		8.25	9.72
	04/16/1999		7.17	10.80
	06/21/1999		8.30	9.67
	07/12/1999		8.61	9.36
	10/08/1999		8.82	9.15
	01/17/2000		8.82	9.15
	04/25/2000		8.02	9.95
	05/30/2000		8.60	9.37
	06/26/2000		8.71	9.26
	08/10/2000		9.08	8.89
	08/31/2000		8.81	9.16
	09/25/2000		8.71	9.26
	10/06/2000		8.45	9.52
	11/21/2000		8.51	9.46
	12/18/2000		9.31	8.66
	01/15/2001		8.61	9.36
	02/14/2001		8.17	9.80
	03/01/2001		7.22	10.75
	04/19/2001		8.90	9.07
	05/23/2001		9.39	8.58
	06/14/2001		9.38	8.59
	07/02/2001		8.98	8.99
	08/10/2001		9.25	8.72
	09/07/2001		9.32	8.65
	10/18/2001		9.28	8.69
	11/02/2001		9.13	8.84
	12/14/2001		7.92	10.05
	01/18/2002		7.21	10.76
	02/21/2002		7.59	10.38
	03/25/2002		7.83	10.14
	04/18/2002		8.04	9.93
	05/10/2002		8.42	9.55
	06/04/2002		8.14	9.83
	07/10/2002		8.50	9.47
	08/15/2002		8.48	9.49
	09/11/2002		8.21	9.76
	10/08/2002		8.32	9.65
	11/07/2002		8.82	9.15

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-5	12/12/2002	17.97	9.03	8.94
	01/13/2003		7.04	10.93
	02/26/2003		7.62	10.35
	03/19/2003		9.33	8.64
	04/14/2003		9.01	8.96
	05/13/2003		8.65	9.32
	06/13/2003		8.27	9.70
	07/07/2003		8.20	9.77
	08/13/2003		8.48	9.49
	09/17/2003		8.63	9.34
	10/27/2003		8.61	9.36
	11/18/2003		9.01	8.96
	12/19/2003		8.31	9.66
	01/15/2004		8.18	9.79
	02/17/2004		8.21	9.76
	03/18/2004		9.02	8.95
	04/21/2004		9.42	8.55
	05/18/2004		9.02	8.95
	06/10/2004		9.20	8.77
	07/13/2004		9.17	8.80
	08/12/2004		9.20	8.77
	09/16/2004		9.15	8.82
	10/12/2004		9.01	8.96
	11/17/2004		9.29	8.68
	12/15/2004		8.98	8.99
	01/24/2005		8.54	9.43
	02/15/2005		9.18	8.79
	03/15/2005		8.78	9.19
	04/25/2005		8.81	9.16
	05/20/2005		8.91	9.06
	06/21/2005		8.90	9.07
	07/20/2005		9.27	8.70
	08/22/2005		9.50	8.47
	09/16/2005		9.35	8.62
	10/21/2005		9.45	8.52
	11/18/2005		9.47	8.50
	12/16/2005		9.22	8.75
	01/20/2006		NM	NM
	02/22/2006		NM	NM
	03/30/2006		5.45	12.52
	04/27/2006		6.80	11.17
	05/18/2006		8.33	9.64
	06/22/2006		8.88	9.09
	07/20/2006		8.91	9.06
	08/17/2006		8.93	9.04

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-5	09/14/2006	17.97	8.87	9.10
	10/19/2006		8.95	9.02
	11/21/2006		7.95	10.02
	12/21/2006		7.45	10.52
	01/18/2007		7.78	10.19
	02/06/2007		7.90	10.07
	03/08/2007		7.01	10.96
	04/12/2007		7.59	10.38
	05/10/2007		7.47	10.50
	06/07/2007		8.88	9.09
	07/19/2007		8.45	9.52
	08/09/2007		NM	NM
	09/14/2007		7.75	10.22
	10/12/2007		7.51	10.46
	11/09/2007		7.43	10.54
	12/14/2007		7.30	10.67
	01/17/2008		6.97	11.00
	02/21/2008		7.11	10.86
	03/20/2008		8.52	9.45
	04/10/2008		9.05	8.92
	05/08/2008		8.80	9.17
	06/12/2008		8.63	9.34
	07/24/2008		9.11	8.86
	08/14/2008		9.10	8.87
	09/18/2008		8.57	9.40
	10/22/2008		8.73	9.24
	11/13/2008		9.07	8.90
	12/04/2008		8.99	8.98
	01/08/2009		8.56	9.41
	02/11/2009		7.82	10.15
	03/12/2009		5.75	12.22
	04/09/2009		7.06	10.91
	05/20/2009		7.23	10.74
	06/17/2009		7.82	10.15
	07/16/2009		8.03	9.94
	08/13/2009		8.19	9.78
	09/10/2009		8.24	9.73
	10/16/2009		7.28	10.67
	11/12/2009		7.88	10.09
	12/03/2009		7.94	10.03
	01/14/2010		8.41	9.56
	02/18/2010		6.60	11.37
	03/25/2010		6.77	11.20
	04/23/2010		6.72	11.25
	05/21/2010		7.59	10.38

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
MW-5	06/10/2010	17.97	8.36	9.61
	07/23/2010		8.21	9.76
	08/12/2010		8.20	9.77
	09/10/2010		7.86	10.11
	10/15/2010		8.94	9.02
	11/04/2010		8.40	9.57
	12/03/2010		8.19	9.78
	01/28/2011		6.67	11.30
	02/10/2011		7.57	10.40
	03/31/2011		5.15	12.82
	04/19/2011		6.70	11.27
PZ-101	03/20/2012	19.01	9.09	9.92
	04/16/2012		8.62	10.39
	05/14/2012		9.30	9.71
	06/11/2012		9.56	9.45
	07/18/2012		9.73	9.28
	08/15/2012		9.83	9.18
	09/13/2012		9.91	9.10
	10/17/2012		9.85	9.16
	11/16/2012		9.46	9.55
	12/14/2012		8.73	10.28
	01/18/2013		9.10	9.91
	02/22/2013		9.67	9.34
	03/21/2013		9.50	9.51
	04/19/2013		9.34	9.67
	07/16/2013		9.99	9.02
	10/07/2013		10.25	8.76
	01/03/2014		10.06	8.95
	04/22/2014		9.45	9.56
	07/08/2014		10.08	8.93
	10/28/2014		10.34	8.67
PZ-102	03/20/2012	16.64	7.82	8.82
	04/16/2012		7.84	8.80
	05/14/2012		8.13	8.51
	06/11/2012		8.40	8.24
	07/18/2012		8.63	8.01
	08/15/2012		8.75	7.89
	09/13/2012		8.83	7.81
	10/17/2012		8.93	7.71
	11/16/2012		8.65	7.99
	12/14/2012		8.08	8.56
	01/18/2013		8.28	8.36
	02/22/2013		8.67	7.97
	03/21/2013		8.79	7.85
	04/19/2013		8.67	7.97

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
PZ-102	07/16/2013	16.64	9.33	7.31
	10/07/2013		9.70	6.94
	01/03/2014		9.31	7.33
	04/22/2014		8.30	8.34
	07/08/2014		9.32	7.32
	10/28/2014		9.78	6.86
RP-1	09/08/1994	17.84	8.65	9.17
	01/27/1995		5.96	11.88
	02/17/1995		7.46	10.38
	02/28/1995		7.83	10.01
	04/13/1995		7.43	10.41
	05/10/1995		7.53	10.31
	08/09/1995		8.39	9.45
	11/17/1995		8.91	8.93
	01/09/1996		7.95	9.89
	04/24/1996		7.81	10.03
	07/29/1996		8.58	9.26
	12/13/1996		6.00	11.84
	04/15/1997		8.18	9.66
	09/19/1997		8.46	9.38
	12/03/1997		7.45	10.39
	12/15/1997		7.41	10.43
	01/13/1998		7.02	10.82
	01/30/1998		6.88	10.96
	02/24/1998		6.18	11.66
	04/06/1998		7.32	10.52
	07/02/1998		8.03	9.81
	07/13/1998		8.14	9.70
	09/28/1998		8.42	9.42
	10/16/1998		8.50	9.34
	01/08/1999		8.26	9.58
	04/16/1999		7.33	10.51
	06/21/1999		8.43	9.41
	07/12/1999		8.63	9.21
	10/08/1999		8.99	8.85
	01/17/2000		8.46	9.38
	04/25/2000		7.89	9.95
	05/30/2000		8.34	9.50
	06/26/2000		8.67	9.17
	08/10/2000		8.92	8.92
	08/31/2000		8.35	9.49
	09/25/2000		8.62	9.22
	10/06/2000		8.70	9.14
	11/21/2000		8.41	9.43
	12/18/2000		8.26	9.58

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-1	01/15/2001	17.84	8.22	9.62
	02/14/2001		7.80	10.04
	03/01/2001		7.11	10.73
	04/19/2001		8.00	9.84
	05/23/2001		8.51	9.33
	06/14/2001		8.59	9.25
	07/02/2001		8.61	9.23
	08/10/2001		8.39	9.45
	09/07/2001		8.37	9.47
	10/18/2001		8.64	9.20
	11/02/2001		8.51	9.33
	12/14/2001		7.26	10.58
	01/18/2002		7.27	10.57
	02/21/2002		7.51	10.33
	03/25/2002		7.72	10.12
	04/18/2002		8.15	9.69
	05/10/2002		8.40	9.44
	06/04/2002		8.04	9.80
	07/10/2002		8.32	9.52
	08/15/2002		8.23	9.61
	09/11/2002		8.01	9.83
	10/08/2002		8.11	9.73
	11/07/2002		8.25	9.59
	12/12/2002		8.10	9.74
	01/13/2003		6.71	11.13
	02/26/2003		6.75	11.09
	03/19/2003		7.55	10.29
	04/14/2003		7.62	10.22
	05/13/2003		7.59	10.25
	06/13/2003		7.86	9.98
	07/07/2003		7.91	9.93
	08/13/2003		8.02	9.82
	09/17/2003		9.10	8.74
	10/27/2003		8.28	9.56
	11/18/2003		8.06	9.78
	12/19/2003		7.41	10.43
	01/15/2004		7.19	10.65
	02/17/2004		7.32	10.52
	03/18/2004		7.61	10.23
	04/21/2004		8.15	9.69
	05/18/2004		8.20	9.64
	06/10/2004		8.40	9.44
	07/13/2004		8.02	9.82
	08/12/2004		8.20	9.64
	09/16/2004		8.31	9.53

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-1	10/12/2004	17.84	8.14	9.70
	11/17/2004		7.75	10.09
	12/15/2004		7.41	10.43
	01/24/2005		7.25	10.59
	02/15/2005		7.65	10.19
	03/15/2005		7.32	10.52
	04/25/2005		7.33	10.51
	05/20/2005		7.52	10.32
	06/21/2005		7.80	10.04
	07/20/2005		8.32	9.52
	08/22/2005		8.50	9.34
	09/16/2005		8.52	9.32
	10/21/2005		8.67	9.17
	11/18/2005		8.44	9.40
	12/16/2005		8.05	9.79
	01/20/2006		6.95	10.89
	02/22/2006		6.93	10.91
	03/30/2006		5.96	11.88
	04/27/2006		6.51	11.33
	05/18/2006		7.21	10.63
	06/22/2006		7.54	10.30
	07/20/2006		7.51	10.33
	08/17/2006		7.39	10.45
	09/14/2006		7.50	10.34
	10/19/2006		7.54	10.30
	11/21/2006		7.60	10.24
	12/21/2006		6.86	10.98
	01/18/2007		7.49	10.35
	02/06/2007		7.85	9.99
	03/08/2007		7.16	10.68
	04/12/2007		7.57	10.27
	05/10/2007		7.48	10.36
	06/07/2007		7.80	10.04
	07/19/2007		7.77	10.07
	08/09/2007		7.62	10.22
	09/14/2007		7.46	10.38
	10/12/2007		7.28	10.56
	11/09/2007		7.29	10.55
	12/14/2007		6.16	11.68
	01/17/2008		7.01	10.83
	02/21/2008		6.75	11.09
	03/20/2008		7.62	10.22
	04/10/2008		7.82	10.02
	05/08/2008		7.98	9.86
	06/12/2008		7.81	10.03

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-1	07/24/2008	17.84	7.99	9.85
	08/14/2008		7.87	9.97
	09/18/2008		7.69	10.15
	10/22/2008		8.15	9.69
	11/13/2008		7.60	10.24
	12/04/2008		7.72	10.12
	01/08/2009		7.32	10.52
	02/11/2009		7.19	10.65
	03/12/2009		6.09	11.75
	04/09/2009		7.01	10.83
	05/20/2009		7.15	10.69
	06/17/2009		7.26	10.58
	07/16/2009		7.49	10.35
	08/13/2009		7.25	10.59
	09/10/2009		7.59	10.25
	10/16/2009		6.70	11.12
	11/12/2009		7.07	10.77
	12/03/2009		7.20	10.64
	01/14/2010		7.21	10.63
	02/18/2010		5.44	12.40
	03/25/2010		6.55	11.29
	04/23/2010		6.54	11.30
	05/21/2010		7.13	10.71
	06/10/2010		7.35	10.49
	07/23/2010		7.19	10.65
	08/12/2010		7.34	10.50
	09/10/2010		7.52	10.32
	10/15/2010		7.80	10.03
	11/04/2010		7.36	10.48
	12/03/2010		7.14	10.70
	01/28/2011		6.81	11.03
	02/10/2011		7.05	10.79
	03/31/2011		5.60	12.24
	04/19/2011		6.76	11.08
	06/27/2011		7.09	10.75
	07/21/2011		7.28	10.56
	08/22/2011		8.60	9.24
	09/23/2011		10.79	7.05
	09/30/2011		10.90	6.94
	10/05/2011		10.25	7.59
	10/12/2011		10.45	7.39
	10/19/2011		11.47	6.37
	10/26/2011		11.83	6.01
	11/02/2011		11.82	6.02
	11/09/2011		10.51	7.33

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-1	11/16/2011	17.84	10.54	7.30
	11/23/2011		10.44	7.40
	11/30/2011		10.64	7.20
	12/06/2011		10.02	7.82
	01/27/2012		8.60	9.24
	02/23/2012		8.15	9.69
	03/20/2012		7.29	10.55
	04/16/2012		6.10	11.74
	05/14/2012		7.09	10.75
	06/11/2012		7.50	10.34
	07/18/2012		7.60	10.24
	08/15/2012		7.49	10.35
	09/13/2012		7.50	10.34
	10/17/2012		7.68	10.16
	11/16/2012		7.35	10.49
	12/14/2012		6.40	11.44
	01/18/2013		6.90	10.94
	02/22/2013		7.30	10.54
	03/21/2013		7.28	10.56
	04/19/2013		7.01	10.83
	07/16/2013		7.72	10.12
	10/07/2013		8.14	9.70
	01/03/2014		7.91	9.93
	04/22/2014		7.44	10.40
	07/08/2014		7.98	9.86
	10/28/2014		8.21	9.63
RP-2	09/08/1994	17.94	8.99	8.94
	01/09/1995		6.40	11.54
	01/27/1995		5.95	11.99
	02/17/1995		7.76	10.18
	02/28/1995		8.11	9.83
	04/13/1995		7.69	10.25
	05/10/1995		7.77	10.17
	08/09/1995		8.67	9.27
	11/17/1995		9.27	8.67
	01/09/1996		8.27	9.67
	04/24/1996		8.04	9.90
	07/29/1996		8.89	9.05
	12/13/1996		6.20	11.74
	04/15/1997		8.46	9.48
	09/19/1997		8.74	9.20
	12/03/1997		7.74	10.20
	12/15/1997		7.66	10.28
	01/13/1998		7.14	10.80
	01/30/1998		7.10	10.84

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-2	02/24/1998	17.94	6.40	11.54
	04/06/1998		7.57	10.37
	07/02/1998		8.27	9.67
	07/13/1998		8.37	9.57
	09/28/1998		8.65	9.29
	10/16/1998		8.42	9.52
	01/08/1999		8.44	9.50
	04/16/1999		7.53	10.41
	06/21/1999		8.64	9.30
	07/12/1999		8.82	9.12
	10/08/1999		9.00	8.94
	01/17/2000		8.75	9.19
	04/25/2000		8.14	9.80
	05/30/2000		8.51	9.43
	06/26/2000		8.78	9.16
	08/10/2000		9.02	8.92
	08/31/2000		8.47	9.47
	09/25/2000		8.71	9.23
	10/06/2000		8.75	9.19
	11/21/2000		7.76	10.18
	12/18/2000		8.51	9.43
	01/15/2001		8.39	9.55
	02/14/2001		7.84	10.10
	03/01/2001		7.30	10.64
	04/19/2001		8.23	9.71
	05/23/2001		8.59	9.35
	06/14/2001		8.72	9.22
	07/02/2001		8.70	9.24
	08/10/2001		8.48	9.46
	09/07/2001		8.55	9.39
	10/18/2001		8.72	9.22
	11/02/2001		8.71	9.23
	12/14/2001		7.61	10.33
	01/18/2002		7.41	10.53
	02/21/2002		7.62	10.32
	03/25/2002		7.99	9.95
	04/18/2002		8.25	9.69
	05/10/2002		8.49	9.45
	06/04/2002		8.24	9.70
	07/10/2002		8.52	9.42
	08/15/2002		8.45	9.49
	09/11/2002		8.29	9.65
	10/08/2002		8.35	9.59
	11/07/2002		8.49	9.45
	12/12/2002		8.25	9.69

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-2	01/13/2003	17.94	6.81	11.13
	02/26/2003		6.83	11.11
	03/19/2003		7.66	10.28
	04/14/2003		7.58	10.36
	05/13/2003		7.73	10.21
	06/13/2003		7.98	9.96
	07/07/2003		8.01	9.93
	08/13/2003		8.18	9.76
	09/17/2003		8.24	9.70
	10/27/2003		8.43	9.51
	11/18/2003		8.25	9.69
	12/19/2003		7.61	10.33
	01/15/2004		7.38	10.56
	02/17/2004		7.31	10.63
	03/18/2004		7.73	10.21
	04/21/2004		8.21	9.73
	05/18/2004		8.27	9.67
	06/10/2004		8.16	9.78
	07/13/2004		8.20	9.74
	08/12/2004		8.25	9.69
	09/16/2004		8.42	9.52
	10/12/2004		8.33	9.61
	11/17/2004		7.96	9.98
	12/15/2004		7.57	10.37
	01/24/2005		7.40	10.54
	02/15/2005		7.74	10.20
	03/15/2005		7.46	10.48
	04/25/2005		7.45	10.49
	05/20/2005		7.65	10.29
	06/21/2005		7.95	9.99
	07/20/2005		8.31	9.63
	08/22/2005		8.50	9.44
	09/16/2005		8.55	9.39
	10/21/2005		8.70	9.24
	11/18/2005		8.52	9.42
	12/16/2005		8.16	9.78
	01/20/2006		7.10	10.84
	02/22/2006		NM	NM
	03/30/2006		5.97	11.97
	04/27/2006		6.62	11.32
	05/18/2006		7.26	10.68
	06/22/2006		7.62	10.32
	07/20/2006		7.56	10.38
	08/17/2006		7.46	10.48
	09/14/2006		7.57	10.37

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-2	10/19/2006	17.94	7.58	10.36
	11/21/2006		7.72	10.22
	12/21/2006		7.02	10.92
	01/18/2007		7.61	10.33
	02/06/2007		7.58	10.36
	03/08/2007		7.20	10.74
	04/12/2007		7.64	10.30
	05/10/2007		7.47	10.47
	06/07/2007		7.85	10.09
	07/19/2007		7.78	10.16
	08/09/2007		7.71	10.23
	09/14/2007		7.63	10.31
	10/12/2007		7.37	10.57
	11/09/2007		7.45	10.49
	12/14/2007		7.29	10.65
	01/17/2008		7.04	10.90
	02/21/2008		6.88	11.06
	03/20/2008		7.66	10.28
	04/10/2008		8.03	9.91
	05/08/2008		8.00	9.94
	06/12/2008		7.85	10.09
	07/24/2008		8.05	9.89
	08/14/2008		7.97	9.97
	09/18/2008		7.80	10.14
	10/22/2008		8.14	9.80
	11/13/2008		7.71	10.23
	12/04/2008		7.80	10.14
	01/08/2009		7.44	10.50
	02/11/2009		7.26	10.68
	03/12/2009		6.16	11.78
	04/09/2009		7.02	10.92
	05/20/2009		7.21	10.73
	06/17/2009		7.39	10.55
	07/16/2009		7.47	10.47
	08/13/2009		7.32	10.62
	09/10/2009		7.61	10.33
	10/16/2009		6.80	11.12
	11/12/2009		7.22	10.72
	12/03/2009		7.39	10.55
	01/14/2010		7.32	10.62
	02/18/2010		6.51	11.43
	03/25/2010		6.69	11.25
	04/23/2010		6.63	11.31
	05/21/2010		7.16	10.78
	06/10/2010		7.43	10.51

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-2	07/23/2010	17.94	7.30	10.64
	08/12/2010		7.48	10.46
	09/10/2010		7.53	10.41
	10/15/2010		7.80	10.13
	11/04/2010		7.47	10.47
	12/03/2010		7.23	10.71
	01/28/2011		6.93	11.01
	02/10/2011		7.18	10.76
	03/31/2011		5.70	12.24
	04/19/2011		6.81	11.13
	06/27/2011		7.25	10.69
	07/21/2011		7.30	10.64
	08/22/2011		8.43	9.51
	09/23/2011		10.95	6.99
	09/30/2011		11.28	6.66
	10/05/2011		11.40	6.54
	10/12/2011		11.59	6.35
	10/19/2011		11.77	6.17
	10/26/2011		11.83	6.11
	11/02/2011		11.91	6.03
	11/09/2011		11.13	6.81
	11/16/2011		10.80	7.14
	11/23/2011		10.47	7.47
	11/30/2011		10.30	7.64
	12/06/2011		10.17	7.77
	01/27/2012		8.83	9.11
	02/23/2012		8.46	9.48
	03/20/2012		8.39	9.55
	04/16/2012		6.17	11.77
	05/14/2012		7.34	10.60
	06/11/2012		7.65	10.29
	07/18/2012		7.78	10.16
	08/15/2012		7.70	10.24
	09/13/2012		7.69	10.25
	10/17/2012		7.82	10.12
	11/16/2012		7.46	10.48
	12/14/2012		6.54	11.40
	01/18/2013		7.07	10.87
	02/22/2013		7.45	10.49
	03/21/2013		7.42	10.52
	04/19/2013		7.16	10.78
	07/16/2013		7.84	10.10
	10/07/2013		8.28	9.66
	01/03/2014		8.09	9.85
	04/22/2014		7.55	10.39

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-2	07/08/2014	17.94	8.19	9.75
	10/28/2014		8.35	9.59
RP-3	09/08/1994	17.87	8.80	9.05
	01/09/1995		6.55	11.32
	01/27/1995		6.12	11.75
	02/17/1995		7.45	10.42
	02/28/1995		7.87	10.00
	04/13/1995		7.44	10.43
	05/10/1995		7.61	10.26
	08/09/1995		8.48	9.39
	11/17/1995		9.09	8.78
	01/09/1996		8.07	9.80
	04/24/1996		7.92	9.95
	07/29/1996		8.71	9.16
	12/13/1996		6.03	11.84
	04/15/1997		8.27	9.60
	09/19/1997		8.58	9.29
	12/03/1997		7.65	10.22
	12/15/1997		7.58	10.29
	01/13/1998		7.23	10.64
	01/30/1998		6.97	10.90
	02/24/1998		6.22	11.65
	04/06/1998		7.43	10.44
	07/02/1998		8.12	9.75
	07/13/1998		8.23	9.64
	09/28/1998		8.53	9.34
	10/16/1998		8.61	9.26
	01/08/1999		8.25	9.62
	04/16/1999		7.40	10.47
	06/21/1999		8.51	9.36
	07/12/1999		8.75	9.12
	10/08/1999		9.09	8.78
	01/17/2000		8.70	9.17
	04/25/2000		8.84	9.03
	05/30/2000		8.42	9.45
	06/26/2000		9.00	8.87
	08/10/2000		10.06	7.81
	08/31/2000		8.49	9.38
	09/25/2000		8.86	9.01
	10/06/2000		8.98	8.89
	11/21/2000		8.90	8.97
	12/18/2000		8.51	9.36
	01/15/2001		8.58	9.29
	02/14/2001		7.87	10.00
	03/01/2001		7.36	10.51

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-3	04/19/2001	17.87	9.32	8.55
	05/23/2001		8.92	8.95
	06/14/2001		8.92	8.95
	07/02/2001		8.80	9.07
	08/10/2001		8.85	9.02
	09/07/2001		8.75	9.12
	10/18/2001		8.99	8.88
	11/02/2001		8.81	9.06
	12/14/2001		7.60	10.27
	01/18/2002		7.82	10.05
	02/21/2002		7.65	10.22
	03/25/2002		7.86	10.01
	04/18/2002		8.43	9.44
	05/10/2002		8.71	9.16
	06/04/2002		8.26	9.61
	07/10/2002		8.36	9.51
	08/15/2002		8.42	9.45
	09/11/2002		8.16	9.71
	10/08/2002		8.36	9.51
	11/07/2002		8.72	9.15
	12/12/2002		8.32	9.55
	01/13/2003		6.89	10.98
	02/26/2003		6.80	11.07
	03/19/2003		7.81	10.06
	04/14/2003		7.85	10.02
	05/13/2003		7.83	10.04
	06/13/2003		8.08	9.79
	07/07/2003		8.01	9.86
	08/13/2003		8.21	9.66
	09/17/2003		8.30	9.57
	10/27/2003		8.45	9.42
	11/18/2003		8.32	9.55
	12/19/2003		7.63	10.24
	01/15/2004		7.42	10.45
	02/17/2004		7.51	10.36
	03/18/2004		7.86	10.01
	04/21/2004		8.44	9.43
	05/18/2004		8.41	9.46
	06/10/2004		8.03	9.84
	07/13/2004		8.29	9.58
	08/12/2004		8.43	9.44
	09/16/2004		8.51	9.36
	10/12/2004		8.33	9.54
	11/17/2004		8.08	9.79
	12/15/2004		7.69	10.18

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-3	01/24/2005	17.87	7.45	10.42
	02/15/2005		7.96	9.91
	03/15/2005		7.65	10.22
	04/25/2005		7.59	10.28
	05/20/2005		7.71	10.16
	06/21/2005		8.02	9.85
	07/20/2005		8.70	9.17
	08/19/2005		8.80	9.07
	09/16/2005		8.73	9.14
	10/21/2005		8.92	8.95
	01/20/2006		7.07	10.80
	02/22/2006		7.17	10.70
	03/30/2006		6.08	11.79
	04/27/2006		6.63	11.24
	05/18/2006		7.37	10.50
	06/22/2006		7.75	10.12
	07/20/2006		7.80	10.07
	08/17/2006		7.65	10.22
	09/14/2006		7.73	10.14
	10/19/2006		7.76	10.11
	11/21/2006		7.82	10.05
	12/21/2006		6.98	10.89
	01/18/2007		7.59	10.28
	02/06/2007		7.98	9.89
	03/08/2007		7.34	10.53
	04/12/2007		7.76	10.11
	05/10/2007		7.68	10.19
	06/07/2007		8.06	9.81
	07/19/2007		7.98	9.89
	08/09/2007		7.80	10.07
	09/14/2007		7.58	10.29
	10/12/2007		7.36	10.51
	11/09/2007		7.38	10.49
	12/14/2007		7.25	10.62
	01/17/2008		7.15	10.72
	02/21/2008		6.89	10.98
	03/20/2008		7.95	9.92
	04/10/2008		8.40	9.47
	05/08/2008		8.30	9.57
	06/12/2008		8.04	9.83
	07/24/2008		8.24	9.63
	08/14/2008		8.13	9.74
	09/18/2008		7.86	10.01
	10/22/2008		8.34	9.53
	11/13/2008		7.87	10.00

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-3	12/04/2008	17.87	7.99	9.88
	01/08/2009		7.60	10.27
	02/11/2009		7.38	10.49
	03/12/2009		6.07	11.80
	04/09/2009		7.23	10.64
	05/20/2009		7.40	10.47
	06/17/2009		7.45	10.42
	07/16/2009		7.70	10.17
	08/13/2009		7.46	10.41
	09/10/2009		7.81	10.06
	10/16/2009		6.84	11.01
	11/12/2009		7.27	10.60
	12/03/2009		7.41	10.46
	01/14/2010		7.48	10.39
	02/18/2010		6.48	11.39
	03/25/2010		6.67	11.20
	04/23/2010		6.61	11.26
	05/21/2010		7.33	10.54
	06/10/2010		7.61	10.26
	07/23/2010		7.38	10.49
	08/12/2010		7.49	10.38
	09/10/2010		7.70	10.17
	10/15/2010		8.02	9.84
	11/04/2010		7.56	10.31
	12/03/2010		7.33	10.54
	01/28/2011		6.86	11.01
	02/10/2011		7.21	10.66
	03/31/2011		5.55	12.32
	04/19/2011		6.78	11.09
	03/20/2012		7.65	10.22
	04/16/2012		6.28	11.59
	05/14/2012		7.29	10.58
	06/11/2012		7.63	10.24
	07/18/2012		7.74	10.13
	08/15/2012		7.74	10.13
	09/13/2012		7.71	10.16
	10/17/2012		7.85	10.02
	11/16/2012		7.52	10.35
	12/14/2012		6.52	11.35
	01/18/2013		7.00	10.87
	02/22/2013		7.52	10.35
	03/21/2013		7.46	10.41
	04/19/2013		7.16	10.71
	07/16/2013		7.94	9.93
	10/07/2013		8.35	9.52

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-3	01/03/2014	17.87	8.17	9.70
	04/22/2014		7.51	10.36
	07/08/2014		8.22	9.65
	10/28/2014		8.52	9.35
RP-4	09/08/1994	17.83	9.02	8.78
	01/09/1995		6.31	11.51
	01/27/1995		5.97	11.85
	02/17/1995		7.79	10.03
	02/28/1995		8.13	9.69
	04/13/1995		7.69	10.13
	05/10/1995		7.77	10.05
	08/09/1995		8.65	9.17
	11/17/1995		9.28	8.54
	01/09/1996		8.28	9.55
	04/24/1996		8.05	9.78
	07/29/1996		8.88	8.95
	12/13/1996		6.12	11.71
	04/15/1997		8.44	9.39
	09/19/1997		8.72	9.11
	12/03/1997		7.75	10.08
	12/15/1997		7.62	10.21
	01/13/1998		7.05	10.78
	01/30/1998		7.02	10.81
	02/24/1998		6.39	11.44
	04/06/1998		7.50	10.33
	07/02/1998		8.23	9.60
	07/13/1998		8.34	9.49
	09/28/1998		8.61	9.22
	10/16/1998		8.70	9.13
	01/08/1999		8.43	9.40
	04/16/1999		7.49	10.34
	06/21/1999		8.59	9.24
	07/12/1999		8.77	9.06
	10/08/1999		8.94	8.89
	01/17/2000		8.74	9.09
	04/25/2000		8.14	9.69
	05/30/2000		8.45	9.38
	06/26/2000		8.70	9.13
	08/10/2000		8.94	8.89
	08/31/2000		8.39	9.44
	09/25/2000		8.59	9.24
	10/06/2000		8.65	9.18
	11/21/2000		8.72	9.11
	12/18/2000		8.49	9.34
	01/15/2001		8.30	9.53

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-4	02/14/2001	17.83	7.80	10.03
	03/01/2001		7.23	10.60
	04/19/2001		8.20	9.63
	05/23/2001		8.48	9.35
	06/14/2001		8.61	9.22
	07/02/2001		8.67	9.16
	08/10/2001		8.51	9.32
	09/07/2001		8.47	9.36
	10/18/2001		8.66	9.17
	11/02/2001		8.67	9.16
	12/14/2001		7.36	10.47
	01/18/2002		7.33	10.50
	02/21/2002		7.57	10.26
	03/25/2002		7.71	10.12
	04/18/2002		8.14	9.69
	05/10/2002		8.42	9.41
	06/04/2002		8.15	9.68
	07/10/2002		8.47	9.36
	08/15/2002		8.38	9.45
	09/11/2002		8.15	9.68
	10/08/2002		8.32	9.51
	11/07/2002		8.42	9.41
	12/12/2002		8.17	9.66
	01/13/2003		6.71	11.12
	02/26/2003		6.75	11.08
	03/19/2003		7.46	10.37
	04/14/2003		7.44	10.39
	05/13/2003		7.59	10.24
	06/13/2003		7.90	9.93
	07/07/2003		7.95	9.88
	08/13/2003		8.10	9.73
	09/17/2003		8.12	9.71
	10/27/2003		8.34	9.49
	11/18/2003		8.16	9.67
	12/19/2003		7.52	10.31
	01/15/2004		7.30	10.53
	02/17/2004		7.21	10.62
	03/18/2004		7.64	10.19
	04/21/2004		8.06	9.77
	05/18/2004		8.17	9.66
	06/10/2004		8.07	9.76
	07/13/2004		8.11	9.72
	08/12/2004		8.15	9.68
	09/16/2004		8.33	9.50
	10/12/2004		8.25	9.58

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-4	11/17/2004	17.83	7.88	9.95
	12/15/2004		7.50	10.33
	01/24/2005		7.30	10.53
	02/15/2005		7.62	10.21
	03/15/2005		7.38	10.45
	04/25/2005		7.32	10.51
	05/20/2005		7.51	10.32
	06/21/2005		7.84	9.99
	07/20/2005		8.20	9.63
	08/22/2005		8.40	9.43
	09/16/2005		8.42	9.41
	10/21/2005		8.60	9.23
	11/18/2005		8.42	9.41
	12/16/2005		8.06	9.77
	01/20/2006		7.02	10.81
	02/22/2006		6.71	11.12
	03/30/2006		5.90	11.93
	04/27/2006		6.56	11.27
	05/18/2006		7.19	10.64
	06/22/2006		7.51	10.32
	07/20/2006		7.48	10.35
	08/17/2006		7.34	10.49
	09/14/2006		7.45	10.38
	10/19/2006		7.48	10.35
	11/21/2006		7.60	10.23
	12/21/2006		6.92	10.91
	01/18/2007		7.50	10.33
	02/06/2007		7.75	10.08
	03/08/2007		7.08	10.75
	04/12/2007		7.56	10.27
	05/10/2007		7.35	10.48
	06/07/2007		7.72	10.11
	07/19/2007		7.66	10.17
	08/09/2007		7.62	10.21
	09/14/2007		7.57	10.26
	10/12/2007		7.29	10.54
	11/09/2007		7.41	10.42
	12/14/2007		7.23	10.60
	01/17/2008		6.92	10.91
	02/21/2008		6.78	11.05
	03/20/2008		7.49	10.34
	04/10/2008		7.88	9.95
	05/08/2008		7.89	9.94
	06/12/2008		7.82	10.01
	07/24/2008		7.95	9.88

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-4	08/14/2008	17.83	7.87	9.96
	09/18/2008		7.74	10.09
	10/22/2008		8.01	9.82
	11/13/2008		7.61	10.22
	12/04/2008		7.71	10.12
	01/08/2009		7.35	10.48
	02/11/2009		7.17	10.66
	03/12/2009		6.10	11.73
	04/09/2009		6.91	10.92
	05/20/2009		7.08	10.75
	06/17/2009		7.31	10.52
	07/16/2009		7.35	10.48
	08/13/2009		7.23	10.60
	09/10/2009		7.52	10.31
	10/16/2009		6.70	11.11
	11/12/2009		7.15	10.68
	12/03/2009		7.32	10.51
	01/14/2010		7.21	10.62
	02/18/2010		6.42	11.41
	03/25/2010		6.61	11.22
	04/23/2010		6.55	11.28
	05/21/2010		7.66	10.17
	06/10/2010		7.30	10.53
	07/23/2010		7.20	10.63
	08/12/2010		7.36	10.47
	09/10/2010		7.41	10.42
	10/15/2010		7.68	10.14
	11/04/2010		7.38	10.45
	12/03/2010		7.16	10.67
	01/28/2011		6.88	10.95
	02/10/2011		7.09	10.74
	03/31/2011		5.61	12.22
	04/19/2011		6.71	11.12
	06/27/2011		7.17	10.66
	07/21/2011		7.20	10.63
	08/22/2011		8.25	9.58
	09/23/2011		10.41	7.42
	09/30/2011		10.78	7.05
	10/05/2011		10.90	6.93
	10/12/2011		11.05	6.78
	10/19/2011		11.27	6.56
	10/26/2011		11.34	6.49
	11/02/2011		11.43	6.40
	11/09/2011		10.90	6.93
	11/16/2011		10.61	7.22

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-4	11/23/2011	17.83	10.31	7.52
	11/30/2011		10.11	7.72
	12/06/2011		10.02	7.81
	01/27/2012		8.76	9.07
	02/23/2012		8.43	9.40
	03/20/2012		7.31	10.52
	04/16/2012		6.09	11.74
	05/14/2012		7.31	10.52
	06/11/2012		7.58	10.25
	07/18/2012		7.65	10.18
	08/15/2012		7.60	10.23
	09/13/2012		7.56	10.27
	10/17/2012		7.76	10.07
	11/16/2012		7.40	10.43
	12/14/2012		6.46	11.37
	01/18/2013		7.00	10.83
	02/22/2013		7.40	10.43
	03/21/2013		7.38	10.45
	04/19/2013		7.03	10.80
	07/16/2013		7.78	10.05
	10/07/2013		8.23	9.60
	01/03/2014		7.98	9.85
	04/22/2014		7.43	10.40
	07/08/2014		8.14	9.69
	10/28/2014		8.32	9.51
RP-5	09/08/1994	17.74	8.95	8.78
	01/09/1995		6.22	11.52
	01/27/1995		5.93	11.81
	02/17/1995		7.71	10.03
	02/28/1995		8.06	9.68
	04/13/1995		7.56	10.18
	05/10/1995		7.69	10.05
	08/09/1995		8.57	9.17
	11/17/1995		9.23	8.51
	01/09/1996		8.21	9.53
	04/24/1996		7.96	9.78
	07/29/1996		8.81	8.93
	12/13/1996		5.93	11.81
	04/15/1997		8.35	9.39
	09/19/1997		8.64	9.10
	12/03/1997		7.64	10.10
	12/15/1997		7.55	10.19
	01/13/1998		7.02	10.72
	01/30/1998		6.97	10.77
	02/24/1998		6.27	11.47

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-5	04/06/1998	17.74	7.44	10.30
	07/02/1998		8.16	9.58
	07/13/1998		8.26	9.48
	09/28/1998		8.54	9.20
	10/16/1998		8.62	9.12
	01/08/1999		8.37	9.37
	04/16/1999		7.43	10.31
	06/21/1999		8.51	9.23
	07/12/1999		8.70	9.04
	10/08/1999		8.90	8.84
	01/17/2000		8.68	9.06
	04/25/2000		8.08	9.66
	05/30/2000		8.40	9.34
	06/26/2000		8.65	9.09
	08/10/2000		8.90	8.84
	08/31/2000		NM	NM
	09/25/2000		8.52	9.22
	10/06/2000		8.62	9.12
	11/21/2000		8.67	9.07
	12/18/2000		8.49	9.25
	01/15/2001		8.27	9.47
	02/14/2001		7.71	10.03
	03/01/2001		7.14	10.60
	04/19/2001		8.13	9.61
	05/23/2001		8.45	9.29
	06/14/2001		8.59	9.15
	07/02/2001		8.61	9.13
	08/10/2001		8.36	9.38
	09/07/2001		8.45	9.29
	10/18/2001		8.62	9.12
	11/02/2001		8.62	9.12
	12/14/2001		7.19	10.55
	01/18/2002		7.28	10.46
	02/21/2002		7.52	10.22
	03/25/2002		7.64	10.10
	04/18/2002		8.11	9.63
	05/10/2002		8.38	9.36
	06/04/2002		8.10	9.64
	07/10/2002		8.43	9.31
	08/15/2002		8.33	9.41
	09/11/2002		8.11	9.63
	10/08/2002		8.25	9.49
	11/07/2002		8.38	9.36
	12/12/2002		8.13	9.61
	01/13/2003		6.72	11.02

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-5	02/26/2003	17.74	6.72	11.02
	03/19/2003		7.51	10.23
	04/14/2003		7.40	10.34
	05/13/2003		7.62	10.12
	06/13/2003		7.84	9.90
	07/07/2003		7.87	9.87
	08/13/2003		8.04	9.70
	09/17/2003		8.80	8.94
	10/27/2003		8.28	9.46
	11/18/2003		8.12	9.62
	12/19/2003		7.45	10.29
	01/15/2004		7.22	10.52
	02/17/2004		7.16	10.58
	03/18/2004		7.60	10.14
	04/21/2004		8.04	9.70
	05/18/2004		8.11	9.63
	06/10/2004		8.05	9.69
	07/13/2004		8.06	9.68
	08/12/2004		8.10	9.64
	09/16/2004		8.28	9.46
	10/12/2004		8.20	9.54
	11/17/2004		7.82	9.92
	12/15/2004		7.43	10.31
	01/24/2005		7.25	10.49
	02/15/2005		7.61	10.13
	03/15/2005		7.33	10.41
	04/25/2005		7.30	10.44
	05/20/2005		7.47	10.27
	06/21/2005		7.76	9.98
	07/20/2005		8.15	9.59
	08/22/2005		8.35	9.39
	09/16/2005		8.39	9.35
	10/21/2005		8.55	9.19
	11/18/2005		8.37	9.37
	12/16/2005		8.00	9.74
	01/20/2006		6.92	10.82
	02/22/2006		6.74	11.00
	03/30/2006		5.85	11.89
	04/27/2006		6.50	11.24
	05/18/2006		7.12	10.62
	06/22/2006		7.47	10.27
	07/20/2006		7.44	10.30
	08/17/2006		7.34	10.40
	09/14/2006		7.43	10.31
	10/19/2006		7.43	10.31

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-5	11/21/2006	17.74	7.59	10.15
	12/21/2006		6.91	10.83
	01/18/2007		7.46	10.28
	02/06/2007		7.71	10.03
	03/08/2007		7.02	10.72
	04/12/2007		7.48	10.26
	05/10/2007		7.31	10.43
	06/07/2007		7.66	10.08
	07/19/2007		7.61	10.13
	08/09/2007		7.60	10.14
	09/14/2007		7.51	10.23
	10/12/2007		7.25	10.49
	11/09/2007		7.32	10.42
	12/14/2007		7.14	10.60
	01/17/2008		6.85	10.89
	02/21/2008		6.75	10.99
	03/20/2008		7.43	10.31
	04/10/2008		7.86	9.88
	05/08/2008		7.84	9.90
	06/12/2008		7.67	10.07
	07/24/2008		7.92	9.82
	08/14/2008		7.83	9.91
	09/18/2008		7.66	10.08
	10/22/2008		7.98	9.76
	11/13/2008		7.58	10.16
	12/04/2008		7.65	10.09
	01/08/2009		7.30	10.44
	02/11/2009		7.13	10.61
	03/12/2009		6.00	11.74
	04/09/2009		6.86	10.88
	05/20/2009		7.03	10.71
	06/17/2009		7.25	10.49
	07/16/2009		7.29	10.45
	08/13/2009		7.18	10.56
	09/10/2009		7.46	10.28
	10/16/2009		6.64	11.08
	11/12/2009		7.07	10.67
	12/03/2009		7.26	10.48
	01/14/2010		7.18	10.56
	02/18/2010		6.35	11.39
	03/25/2010		6.55	11.19
	04/23/2010		6.50	11.24
	05/21/2010		6.98	10.76
	06/10/2010		7.22	10.52
	07/23/2010		7.12	10.62

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-5	08/12/2010	17.74	7.28	10.46
	09/10/2010		7.35	10.39
	10/15/2010		7.61	10.12
	11/04/2010		7.33	10.41
	12/03/2010		7.09	10.65
	01/28/2011		6.80	10.94
	02/10/2011		7.00	10.74
	03/31/2011		5.51	12.23
	04/19/2011		6.63	11.11
	06/27/2011		7.09	10.65
	07/21/2011		7.12	10.62
	08/22/2011		8.18	9.56
	09/23/2011		10.26	7.48
	09/30/2011		10.63	7.11
	10/05/2011		10.75	6.99
	10/12/2011		10.94	6.80
	10/19/2011		11.18	6.56
	10/26/2011		11.27	6.47
	11/02/2011		11.33	6.41
	11/09/2011		10.86	6.88
	11/16/2011		10.57	7.17
	11/23/2011		10.28	7.46
	11/30/2011		10.10	7.64
	12/06/2011		9.99	7.75
	01/27/2012		8.79	8.95
	02/23/2012		8.40	9.34
	03/20/2012		7.23	10.51
	04/16/2012		6.05	11.69
	05/14/2012		7.22	10.52
	06/11/2012		7.53	10.21
	07/18/2012		7.63	10.11
	08/15/2012		7.55	10.19
	09/13/2012		7.54	10.20
	10/17/2012		7.71	10.03
	11/16/2012		7.35	10.39
	12/14/2012		6.39	11.35
	01/18/2013		6.93	10.81
	02/22/2013		7.34	10.40
	03/21/2013		7.31	10.43
	04/19/2013		7.00	10.74
	07/16/2013		7.70	10.04
	10/07/2013		8.17	9.57
	01/03/2014		7.94	9.80
	04/22/2014		7.37	10.37
	07/08/2014		8.09	9.65

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-5	10/28/2014	17.74	8.27	9.47
RP-BW-02	10/08/1999	18.67	9.89	8.78
	01/17/2000		9.56	9.11
	04/25/2000		8.81	9.86
	05/30/2000		9.19	9.48
	06/26/2000		NM	NM
	08/10/2000		9.75	8.92
	10/06/2000		9.70	8.97
	01/15/2001		9.08	9.59
	04/19/2001		8.94	9.73
	07/02/2001		9.51	9.16
	09/07/2001		8.52	10.15
	10/18/2001		9.55	9.12
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		8.37	10.30
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		9.13	9.54
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		9.41	9.26
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		9.30	9.37
	01/13/2003		8.12	10.55
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		8.51	10.16
	07/07/2003		9.04	9.63
	08/13/2003		9.26	9.41
	10/27/2003		NM	NM
	11/18/2003		NM	NM
	01/15/2004		8.35	10.32
	02/17/2004		7.52	11.15
	03/18/2004		8.73	9.94
	04/21/2004		9.06	9.61
	07/13/2004		9.19	9.48
	10/12/2004		9.22	9.45
	01/24/2005		8.39	10.28
	04/25/2005		8.44	10.23
	07/20/2005		9.18	9.49
	10/21/2005		9.51	9.16
	01/20/2006		7.95	10.72
	04/27/2006		7.95	10.72

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
RP-BW-02	07/20/2006	18.67	8.70	9.97
	10/19/2006		8.71	9.96
	01/18/2007		8.56	10.11
	04/12/2007		8.71	9.96
	07/19/2007		8.85	9.82
	10/12/2007		8.37	10.30
	01/17/2008		8.02	10.65
	04/10/2008		8.94	9.73
	07/24/2008		9.08	9.59
	10/22/2008		9.07	9.60
	01/08/2009		8.39	10.28
	04/09/2009		8.16	10.51
	07/16/2009		8.63	10.04
	10/16/2009		7.98	10.67
	01/14/2010		8.42	10.25
	04/23/2010		7.78	10.89
	07/23/2010		8.53	10.14
	10/15/2010		8.94	9.72
	01/28/2011		8.07	10.60
	04/19/2011		8.03	10.64
SA-AW-01	10/08/1999	12.33	3.79	8.54
	01/17/2000		3.69	8.64
	04/25/2000		3.04	9.29
	05/30/2000		3.50	8.83
	06/26/2000		NM	NM
	08/10/2000		3.92	8.41
	10/06/2000		3.80	8.53
	01/15/2001		2.33	10.00
	04/19/2001		3.10	9.23
	07/02/2001		3.58	8.75
	09/07/2001		NM	NM
	10/18/2001		3.53	8.80
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		2.80	9.53
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		3.25	9.08
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		3.49	8.84
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		3.54	8.79
	01/13/2003		3.57	8.76

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
SA-AW-01	02/26/2003	12.33	NM	NM
	03/19/2003		NM	NM
	04/14/2003		2.00	10.33
	07/07/2003		3.42	8.91
	10/27/2003		NM	NM
	11/18/2003		3.18	9.15
	01/15/2004		2.65	9.68
	04/21/2004		3.13	9.20
	07/13/2004		3.45	8.88
	10/12/2004		3.46	8.87
	01/24/2005		2.66	9.67
	04/25/2005		3.87	8.46
	07/20/2005		3.34	8.99
	10/21/2005		3.61	8.72
	01/20/2006		3.47	8.86
	04/27/2006		2.62	9.71
	07/20/2006		3.26	9.07
	10/19/2006		3.42	8.91
	01/18/2007		2.99	9.34
	04/12/2007		3.06	9.27
	07/19/2007		3.35	8.98
	10/12/2007		2.19	10.14
	01/17/2008		2.11	10.22
	04/10/2008		3.27	9.06
	07/24/2008		3.89	8.44
	10/22/2008		3.45	8.88
	01/08/2009		2.46	9.87
	04/09/2009		2.71	9.62
	07/16/2009		3.37	8.96
	10/16/2009		1.51	10.80
	01/14/2010		2.51	9.82
	04/23/2010		3.49	8.84
	07/23/2010		3.31	9.02
	10/15/2010		3.43	8.89
	01/28/2011		2.62	9.71
	04/19/2011		2.55	9.78
SA-AW-02	01/15/2001	12.10	2.24	9.86
	04/19/2001		3.04	9.06
	07/02/2001		3.04	9.06
	09/07/2001		NM	NM
	10/18/2001		3.20	8.90
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		2.51	9.59
	02/21/2002		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
SA-AW-02	03/25/2002	12.10	NM	NM
	04/18/2002		2.79	9.31
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		3.14	8.96
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		3.18	8.92
	01/13/2003		2.09	10.01
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		2.28	9.82
	07/07/2003		3.03	9.07
	10/27/2003		NM	NM
	11/18/2003		2.91	9.19
	01/15/2004		2.40	9.70
	04/21/2004		2.82	9.28
	07/13/2004		3.13	8.97
	10/12/2004		3.12	8.98
	01/24/2005		2.45	9.65
	04/25/2005		2.64	9.46
	10/21/2005		2.25	9.85
	01/20/2006		1.85	10.25
	04/27/2006		2.45	9.65
	07/20/2006		2.93	9.17
	10/19/2006		3.06	9.04
	01/18/2007		2.73	9.37
	04/12/2007		2.75	9.35
	07/19/2007		3.01	9.09
	10/12/2007		1.97	10.13
	01/17/2008		2.00	10.10
SA-AW-03	10/08/1999	11.45	2.55	8.90
	01/17/2000		2.31	9.14
	04/25/2000		2.12	9.33
	05/30/2000		2.28	9.17
	06/26/2000		NM	NM
	08/10/2000		2.56	8.89
	10/06/2000		2.59	8.86
	01/15/2001		1.99	9.46
	04/19/2001		2.25	9.20
	07/02/2001		2.39	9.06
	09/07/2001		NM	NM
	10/18/2001		2.36	9.09
	11/02/2001		NM	NM
	12/14/2001		NM	NM

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
SA-AW-03	01/18/2002	11.45	2.07	9.38
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		2.25	9.20
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		2.36	9.09
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		2.35	9.10
	01/13/2003		1.81	9.64
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		1.85	9.60
	07/07/2003		2.31	9.14
	10/27/2003		NM	NM
	11/18/2003		2.18	9.27
	01/15/2004		1.01	10.44
	04/21/2004		2.15	9.30
	07/13/2004		NM	NM
	01/24/2005		1.98	9.47
	04/25/2005		2.06	9.39
	07/20/2005		2.01	9.44
	10/21/2005		NM	NM
	01/20/2006		1.82	9.63
	04/27/2006		1.95	9.50
	07/20/2006		2.19	9.26
	10/19/2006		2.21	9.24
	01/18/2007		2.09	9.36
	04/12/2007		2.07	9.38
	07/19/2007		2.16	9.29
	10/12/2007		NM	NM
	01/17/2008		NM	NM
SA-AW-04	10/08/1999	12.72	2.75	9.97
	01/17/2000		2.50	10.22
	04/25/2000		2.30	10.42
	05/30/2000		2.48	10.24
	06/26/2000		NM	NM
	08/10/2000		2.70	10.02
	10/06/2000		2.98	9.74
	01/15/2001		2.18	10.54
	04/19/2001		2.44	10.28
	07/02/2001		2.50	10.22
	09/07/2001		NM	NM
	10/18/2001		2.48	10.24

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
SA-AW-04	11/02/2001	12.72	NM	NM
	12/14/2001		NM	NM
	01/18/2002		2.11	10.61
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		2.34	10.38
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		2.43	10.29
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		2.41	10.31
	01/13/2003		1.80	10.92
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		1.85	10.87
	07/07/2003		2.79	9.93
	10/27/2003		NM	NM
	11/18/2003		2.24	10.48
	01/15/2004		1.98	10.74
	04/21/2004		2.21	10.51
	07/13/2004		2.37	10.35
	10/12/2004		2.39	10.33
	01/24/2005		2.00	10.72
	04/25/2005		2.10	10.62
	07/20/2005		2.30	10.42
	10/21/2005		2.49	10.23
	01/20/2006		1.78	10.94
	04/27/2006		2.00	10.72
	07/20/2006		2.31	10.41
	10/19/2006		2.32	10.40
	01/18/2007		2.21	10.51
	04/12/2007		2.19	10.53
	07/19/2007		2.33	10.39
	10/12/2007		1.89	10.83
	01/17/2008		1.86	10.86
	04/10/2008		2.35	10.37
	07/24/2008		2.66	10.06
	10/22/2008		2.57	10.15
	01/08/2009		1.95	10.77
	04/09/2009		1.87	10.85
	07/16/2009		2.40	10.32
	10/16/2009		1.58	11.12
	01/14/2010		1.93	10.79
	04/23/2010		1.78	10.94

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
SA-AW-04	07/23/2010	12.72	2.33	10.39
	10/15/2010		2.50	10.21
	01/28/2011		2.02	10.70
	04/19/2011		2.06	10.66
SA-AW-05	10/08/1999	15.42	5.20	10.22
	01/17/2000		5.05	10.37
	04/25/2000		4.60	10.82
	05/30/2000		4.84	10.58
	06/26/2000		NM	NM
	08/10/2000		5.08	10.34
	10/06/2000		5.08	10.34
	01/15/2001		4.48	10.94
	04/19/2001		4.81	10.61
	07/02/2001		4.92	10.50
	09/07/2001		NM	NM
	10/18/2001		4.81	10.61
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		4.44	10.98
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		4.67	10.75
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		4.89	10.53
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		4.81	10.61
	01/13/2003		3.42	12.00
	02/26/2003		NM	NM
	03/19/2003		NM	NM
	04/14/2003		4.23	11.19
	07/07/2003		4.81	10.61
	10/27/2003		NM	NM
	11/18/2003		4.59	10.83
	01/15/2004		4.40	11.02
	04/21/2004		4.50	10.92
	07/13/2004		4.76	10.66
	10/12/2004		4.79	10.63
	01/24/2005		4.28	11.14
	04/25/2005		4.43	10.99
	07/20/2005		4.65	10.77
	10/21/2005		4.88	10.54
	01/20/2006		4.25	11.17
	04/27/2006		4.33	11.09

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
SA-AW-05	07/20/2006	15.42	4.69	10.73
	10/19/2006		4.73	10.69
	01/18/2007		4.57	10.85
	04/12/2007		4.55	10.87
	07/19/2007		4.74	10.68
	10/12/2007		4.28	11.14
	01/17/2008		4.20	11.22
	04/10/2008		4.74	10.68
	07/24/2008		5.08	10.34
	10/22/2008		4.94	10.48
	01/08/2009		4.26	11.16
	04/09/2009		4.18	11.24
	07/16/2009		4.80	10.62
	10/16/2009		3.93	11.47
	01/14/2010		4.36	11.06
	04/23/2010		4.14	11.28
	07/23/2010		4.75	10.67
	10/15/2010		4.90	10.51
	01/28/2011		4.43	10.99
	04/19/2011		4.41	11.01
SA-BW-01	10/08/1999	12.77	4.64	8.13
	01/17/2000		5.11	7.66
	04/25/2000		3.98	8.79
	05/30/2000		4.77	8.00
	06/26/2000		NM	NM
	08/10/2000		4.85	7.92
	10/06/2000		4.71	8.06
	01/15/2001		4.10	8.67
	04/19/2001		4.65	8.12
	07/02/2001		4.65	8.12
	09/07/2001		NM	NM
	10/18/2001		4.43	8.34
	11/02/2001		NM	NM
	12/14/2001		NM	NM
	01/18/2002		4.71	8.06
	02/21/2002		NM	NM
	03/25/2002		NM	NM
	04/18/2002		4.26	8.51
	05/10/2002		NM	NM
	06/04/2002		NM	NM
	07/10/2002		4.46	8.31
	08/15/2002		NM	NM
	09/11/2002		NM	NM
	10/08/2002		4.42	8.35
	01/13/2003		2.16	10.61

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
SA-BW-01	02/26/2003	12.77	NM	NM
	03/19/2003		NM	NM
	04/14/2003		3.88	8.89
	07/07/2003		4.35	8.42
	10/27/2003		NM	NM
	11/18/2003		4.34	8.43
	01/15/2004		3.71	9.06
	04/21/2004		4.14	8.63
	07/13/2004		4.39	8.38
	10/12/2004		4.42	8.35
	01/24/2005		3.80	8.97
	03/15/2005		0.00	12.77
	04/25/2005		3.87	8.90
	07/20/2005		4.16	8.61
	10/21/2005		4.58	8.19
	01/20/2006		1.83	10.94
	04/27/2006		3.56	9.21
	07/20/2006		4.14	8.63
	10/19/2006		4.28	8.49
	01/18/2007		4.03	8.74
	04/12/2007		4.05	8.72
	07/19/2007		4.27	8.50
	10/12/2007		4.03	8.74
	01/17/2008		4.08	8.69
	04/10/2008		4.24	8.53
	07/24/2008		4.46	8.31
	10/22/2008		4.53	8.24
	01/08/2009		3.76	9.01
	04/09/2009		3.79	8.98
	07/16/2009		4.19	8.58
	10/16/2009		3.65	9.10
	01/14/2010		4.40	8.37
	04/23/2010		1.81	10.96
	07/23/2010		4.12	8.65
	10/15/2010		4.31	8.45
	01/28/2011		3.79	8.98
	04/19/2011		3.78	8.99
SP-AW-06	01/15/2001	21.42	11.49	9.93
	04/19/2001		11.37	10.05
	05/23/2001		11.71	9.71
	06/14/2001		11.83	9.59
	07/02/2001		11.84	9.58
	08/10/2001		11.62	9.80
	09/07/2001		11.67	9.75
	10/18/2001		12.01	9.41

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
SP-AW-06	11/02/2001	21.42	12.78	8.64
	12/14/2001		10.65	10.77
	01/18/2002		10.58	10.84
	02/21/2002		10.67	10.75
	03/25/2002		10.87	10.55
	04/18/2002		11.32	10.10
	05/10/2002		11.51	9.91
	06/04/2002		11.41	10.01
	07/10/2002		11.64	9.78
	08/15/2002		11.63	9.79
	09/11/2002		11.49	9.93
	10/08/2002		11.54	9.88
	11/07/2002		11.82	9.60
	12/12/2002		11.41	10.01
	01/13/2003		9.88	11.54
	02/26/2003		10.16	11.26
	03/19/2003		10.83	10.59
	04/14/2003		10.62	10.80
	05/13/2003		10.91	10.51
	06/13/2003		11.19	10.23
	07/07/2003		11.25	10.17
	08/13/2003		11.41	10.01
	09/17/2003		11.40	10.02
	10/27/2003		11.57	9.85
	11/18/2003		11.38	10.04
	12/19/2003		10.77	10.65
	01/15/2004		10.57	10.85
	02/17/2004		10.45	10.97
	03/18/2004		10.91	10.51
	04/21/2004		11.25	10.17
	05/18/2004		11.33	10.09
	06/10/2004		11.25	10.17
	07/13/2004		11.34	10.08
	08/12/2004		11.37	10.05
	09/16/2004		11.53	9.89
	10/12/2004		11.48	9.94
	11/17/2004		11.05	10.37
	12/15/2004		10.73	10.69
	01/25/2005		10.67	10.75
	02/15/2005		10.65	10.77
	03/15/2005		10.63	10.79
	04/25/2005		10.57	10.85
	05/20/2005		10.80	10.62
	06/21/2005		11.10	10.32
	07/20/2005		11.41	10.01

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
SP-AW-06	08/22/2005	21.42	11.58	9.84
	09/16/2005		11.62	9.80
	10/21/2005		NM	NM
	01/20/2006		9.47	11.95
	02/22/2006		5.41	16.01
	03/30/2006		9.00	12.42
	04/27/2006		9.66	11.76
	05/18/2006		10.20	11.22
	06/22/2006		10.50	10.92
	07/20/2006		10.48	10.94
	08/17/2006		10.38	11.04
	09/14/2006		10.56	10.86
	10/19/2006		5.56	15.86
	11/21/2006		10.68	10.74
	12/21/2006		10.08	11.34
	01/18/2007		10.63	10.79
	02/06/2007		10.83	10.59
	03/08/2007		10.21	11.21
	04/12/2007		10.63	10.79
	05/10/2007		10.45	10.97
	06/07/2007		10.82	10.60
	07/19/2007		10.80	10.62
	08/09/2007		NM	NM
	09/14/2007		10.74	10.68
	10/12/2007		10.48	10.94
	11/09/2007		10.63	10.79
	12/14/2007		10.41	11.01
	01/17/2008		10.08	11.34
	02/21/2008		10.01	11.41
	03/20/2008		10.62	10.80
	04/10/2008		10.93	10.49
	05/08/2008		10.96	10.46
	06/12/2008		10.82	10.60
	07/24/2008		11.05	10.37
	08/14/2008		11.00	10.42
	09/18/2008		10.91	10.51
	10/22/2008		11.11	10.31
	11/13/2008		10.66	10.76
	12/04/2008		10.79	10.63
	01/08/2009		10.40	11.02
	02/11/2009		10.23	11.19
	03/12/2009		9.32	12.10
	04/09/2009		10.01	11.41
	05/20/2009		10.21	11.21
	06/17/2009		10.42	11.00

Table D-1
Historical Groundwater Elevation Data (NAVD 88 Datum)
The Sherwin-Williams Company
Emeryville, California

Well Number	Date	Well Elevation	Measured Depth to Water (ft)	Groundwater Elevation
SP-AW-06	07/16/2009	21.42	10.49	10.93
	08/13/2009		10.38	11.04
	09/10/2009		10.64	10.78
	10/16/2009		9.85	11.55
	11/12/2009		10.24	11.18
	12/03/2009		10.45	10.97
	01/14/2010		10.35	11.07
	02/18/2010		9.62	11.80
	03/25/2010		9.81	11.61
	04/23/2010		9.72	11.70
	05/21/2010		10.18	11.24
	06/10/2010		10.38	11.04
	07/23/2010		10.39	11.03
	08/12/2010		10.51	10.91
	09/10/2010		10.52	10.90
	10/15/2010		10.87	10.54
	11/04/2010		10.53	10.89
	12/03/2010		10.30	11.12
	01/28/2011		10.14	11.28
	02/10/2011		10.31	11.11
	03/31/2011		9.00	12.42
	04/19/2011		9.97	11.45

Data updated by MSM. Proofed by EW

Notes:

ft = Feet
NM = Not measured

(a) Measurement taken at higher high tide

(b) Measurement taken at lower low tide

(c) Measurement taken at lower high tide

(d) Suspect that depth to groundwater was measured in LF-B3 instead of LF-21 on August 17, and September 6, 14, 21, and 28, 2007, due to a field oversight

(e) South Bayfront Project Area (SBPA) well monitored by SLR consulting

(f) SBPA well monitored by EKI personnel

(1) Depth to water measurement determined not to be accurate due to damaged well casing.

(2) The depth to water measurement made in LF-B5 on April 9, 2009 was determined to be erroneous: well LF-B5 was remeasured on April 17, 2009.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
CDM-1	14-Feb-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	14-Feb-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-1	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-1	19-Jul-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	19-Jul-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-1	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-1	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-1	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-1	18-Apr-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-101	17-Apr-12	<0.0005	0.0021	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-101	19-Oct-12	<0.0005	0.0019	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-101	22-Apr-13	<0.0005	0.0015	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-101	07-Oct-13	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-101	28-Apr-14	<0.0005	0.0015	<0.0005	<0.01	<0.01 U6	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	0.0001 J	<0.0005	<0.0005	<0.0005	<0.001
DUP	28-Apr-14	<0.0005	0.0015	<0.0005	<0.01	<0.01 U6	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	0.0001 J	<0.0005	<0.0005	<0.0005	<0.001
CDM-101	29-Oct-14	<0.0005	0.0008	<0.0005	<0.01	<0.01 U12	0.0002 J	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	29-Oct-14	<0.0005	0.0008	<0.0005	<0.01	<0.01 U12	0.0002 J	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-102	17-Apr-12	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	0.0066 J	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.001
CDM-102	19-Oct-12	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0004 J	<0.001
CDM-102	22-Apr-13	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	<0.001
CDM-102	07-Oct-13	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0002 J	<0.001
CDM-102	07-Oct-13	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0002 J	<0.001
CDM-102	28-Apr-14	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0002 J	<0.001
CDM-102	29-Oct-14	<0.0005	0.0011	<0.0005	<0.01	<0.01 U5	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-103	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0004 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-103	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-103	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-104	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-104	24-Apr-13	<0.0005	0.0011	<0.0005	<0.01	<0.01	0.0001 J	<0.0005	<0.0005	0.0049	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	0.0006	<0.001
CDM-104	25-Apr-14	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	<0.01	<0.0005	<0.0005	0.0002 J	<0.0005	<0.0005	<0.001
CDM-105	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0032	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-105	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	0.0019 J	<0.0005	0.0039	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-105	25-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0026	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-106	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005 J
CDM-106	24-Apr-13	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	0.0012	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0004 J	<0.001
CDM-106	25-Apr-14	<0.0005	0.0009	<0.0005	<0.01	<0.01	0.0001 J	0.0009	<0.0005	0.0011	<0.0005	<0.01	<0.0005	0.0002 J	<0.0005	<0.0005	0.0001 J	<0.001
CDM-107	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-107	19-Oct-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
CDM-1	14-Feb-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	14-Feb-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-1	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-1	19-Jul-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Jul-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-1	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-1	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-1	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-1	18-Apr-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-101	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-101	19-Oct-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-101	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-101	07-Oct-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-101	28-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0001 J	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	28-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0001 J	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-101	29-Oct-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	29-Oct-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-102	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-102	19-Oct-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-102	22-Apr-13	0.0002 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-102	07-Oct-13	0.0002 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-102	07-Oct-13	0.0002 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-102	28-Apr-14	0.0002 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-102	29-Oct-14	0.0002 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-103	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-103	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-103	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-104	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	0.0006 J	<0.001	<0.0005	<0.0005
CDM-104	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-104	25-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-105	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-105	24-Apr-13	<0.0005	<0.0005	0.0001 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-105	25-Apr-14	<0.0005	<0.0005	0.0001 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-106	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-106	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-106	25-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-107	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-107	19-Oct-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
CDM-1	14-Feb-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	14-Feb-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-1	20-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-1	19-Jul-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0013	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	19-Jul-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0011	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-1	16-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0011	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-1	17-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	0.0003 J	0.0016	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	17-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	0.0003 J	0.0016	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-1	26-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0013	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-1	18-Apr-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0009	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-101	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
CDM-101	19-Oct-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
CDM-101	22-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
CDM-101	07-Oct-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
CDM-101	28-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
DUP	28-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
CDM-101	29-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
DUP	29-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
CDM-102	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
CDM-102	19-Oct-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
CDM-102	22-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
CDM-102	07-Oct-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
CDM-102	07-Oct-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
CDM-102	28-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
CDM-102	29-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
CDM-103	18-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
CDM-103	24-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
CDM-103	29-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
CDM-104	18-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-104	24-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
CDM-104	25-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
CDM-105	18-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0012	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-105	24-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0008	<0.01	0.0001 J	0.0002 J	<0.0005	<0.0005
CDM-105	25-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.001	<0.01	0.0002 J	0.0002 J	<0.0005	<0.0005
CDM-106	18-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-106	24-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0001 J	<0.01	<0.0005	0.0009	<0.0005	<0.0005
CDM-106	25-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0002 J	<0.01	<0.0005	0.001	<0.0005	<0.0005
CDM-107	18-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
CDM-107	19-Oct-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
CDM-107	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0001 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-107	07-Oct-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0002 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-107	25-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0002 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-107	29-Oct-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0001 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-108	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-108	19-Oct-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-108	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	0.0002 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-108	07-Oct-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	07-Oct-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0002 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-108	25-Apr-14	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	0.0002 J	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	25-Apr-14	<0.0005	0.0002 J	<0.0005	<0.01	<0.01	<0.0005	0.0002 J	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-108	29-Oct-14	<0.0005	0.0002 J	<0.0005	<0.01	<0.01	<0.0005	0.0002 J	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-109	19-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-109	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-109	25-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	0.0007 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-110	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-110	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-110	24-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005 U12	<0.0005	<0.0005	<0.0005	0.0001 J
CDM-111	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-111	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0002 J
CDM-111	24-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0002 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-112	19-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	19-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-112	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0002 J	<0.0005	<0.001
CDM-112	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0001 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0002 J	<0.0005	<0.001
CDM-113	19-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-113	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0001 J	0.0005 J	<0.0005	0.0001 J	<0.0005	<0.01	<0.0005	0.0002 J	<0.0005	<0.0005	<0.0005	0.0005 J
CDM-113	24-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	0.0008 J	0.0001 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005 U12	<0.0005	<0.0005	<0.0005	0.0006 JJ
CDM-114	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-114	19-Oct-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	19-Oct-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-114	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
CDM-114	24-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0002 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005 U12	<0.0005	<0.0005	<0.0005	<0.001
DUP	24-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005 U12	<0.0005	<0.0005	<0.0005	<0.001
EX-1	18-Apr-96	<0	<0.005	<0.005	<0.05	<0.1	0.0011	<0.005	<0.005	<0.005	0.006	<0.1	<0.005	0.0009	<0.005	<0.005	<0.01	0.02
EX-1	01-Aug-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	0.027	<0.005	<0.005	<0.01	0.019

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
CDM-107	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-107	07-Oct-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-107	25-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-107	29-Oct-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-108	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-108	19-Oct-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-108	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-108	07-Oct-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	07-Oct-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-108	25-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	25-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-108	29-Oct-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-109	19-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-109	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-109	25-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-110	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-110	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-110	24-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-111	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-111	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0001 J	<0.0005
CDM-111	24-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-112	19-Apr-12	0.0004 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Apr-12	0.0004 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-112	24-Apr-13	0.0004 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-112	29-Apr-14	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-113	19-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-113	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0002 J	<0.0005
CDM-113	24-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0002 J	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0002 J	<0.0005
CDM-114	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-114	19-Oct-12	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Oct-12	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-114	23-Apr-13	<0.0005	<0.0005	0.0002 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	23-Apr-13	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
CDM-114	24-Apr-14	<0.0005	<0.0005	0.0002 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	24-Apr-14	<0.0005	<0.0005	0.0002 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	18-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
EX-1	01-Aug-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
CDM-107	23-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
CDM-107	07-Oct-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
CDM-107	25-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
CDM-107	29-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
CDM-108	18-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-108	19-Oct-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-108	24-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0001 J	<0.0005	<0.0005
CDM-108	07-Oct-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0001 J	<0.0005	<0.0005
DUP	07-Oct-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0001 J	<0.0005	<0.0005
CDM-108	25-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0002 J	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
DUP	25-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0001 J	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
CDM-108	29-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0002 J	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
CDM-109	19-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-109	24-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	24-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-109	25-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-110	18-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	18-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-110	23-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-110	24-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-111	18-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	0.0024	0.002	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-111	23-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	0.0027	0.0022	<0.01	0.0004 J	<0.0005	<0.0005	<0.0005
CDM-111	24-Apr-14	<0.0005	<0.0005	0.0003 J	<0.0005	0.0007	0.0015	<0.01	0.0002 J	<0.0005	<0.0005	<0.0005
CDM-112	19-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	19-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-112	24-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-112	29-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-113	19-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	0.0013	0.002	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-113	24-Apr-13	<0.0005	<0.0005	0.0009 J	<0.0005	0.0022	0.0029	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-113	24-Apr-14	<0.0005	<0.0005	0.0007 J	<0.0005	0.0019	0.0033	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-114	18-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0021	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-114	19-Oct-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0023	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	19-Oct-12	<0.0005	<0.0005	<0.002	<0.0005	0.0003 J	0.0025	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-114	23-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	0.0002 J	0.0025	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	23-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	0.0002 J	0.0024	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
CDM-114	24-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	0.0001 J	0.0021	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	24-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	0.0001 J	0.0023	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	18-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
EX-1	01-Aug-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
EX-1	18-Dec-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	0.031	<0.1	<0.005	0.87	<0.005	<0.005	<0.01	1.4
EX-1	15-Apr-97	<0	<0.5	<0.5	<5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	3.2	<0.5	<0.5	<1	2.2
EX-1	01-Jul-97	<0	<0.1	<0.1	<1	<2	<0.1	<0.1	<0.1	<0.1	0.1	<2	<0.1	2	<0.1	<0.1	<0.2	1.8
EX-1	22-Sep-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	0.21
EX-1	18-Dec-97	<0	<0.03	<0.03	<0.3	<0.5	<0.03	<0.03	<0.03	<0.03	0.22	<0.5	<0.03	0.2	<0.03	<0.03	<0.05	0.74
EX-1	27-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	0.0023	0.002	<0.001	0.0012	0.11	<0.02	<0.001	0.0039	<0.001	<0.001	<0.002	0.248
EX-1	09-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.011
EX-1	17-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0022	<0.001	<0.001	0.0017	<0.005	<0.001	0.0051	<0.001	<0.001	<0.001	0.015
EX-1	23-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0018	<0.001	<0.001	0.0026	<0.005	<0.001	0.0038	<0.001	<0.001	<0.001	0.014
EX-1	14-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0017	<0.001	<0.001	0.001 J11	<0.005	<0.001	0.0042	<0.001	<0.001	<0.001	0.0063
EX-1	23-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0008 J11	<0.001	<0.001	0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-1	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	<0.0005	0.0039	<0.01	<0.0005	0.0059	<0.0005	<0.0005	<0.0005	0.033
EX-1	13-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0038	<0.0005	<0.0005	<0.0005	<0.001
EX-1	25-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.001
EX-1	26-Apr-00	<0.0008	<0.0008	<0.0008	<0.017	0.061	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.024	<0.0008	0.0009	<0.0008	<0.0008	<0.0008	0.0025
EX-1	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0014
EX-1	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	0.0051
EX-1	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-1	16-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0013	0.0021	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-1	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0014	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002
EX-1	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-1	21-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0006	0.0009	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	21-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0006	0.0009	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-1	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0018
EX-1	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0026
DUP	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0023
EX-1	12-Dec-02	<0.0005	0.01	<0.0005	<0.01	0.27	0.0032	<0.0005	0.0021	0.0023	0.046	0.067	<0.0005	0.35	0.0009	0.0034	<0.0005	0.498
EX-1	13-Jan-03	<0.005	0.0071	<0.005	<0.1	1.2	0.011	<0.005	<0.005	<0.005	0.18	0.51	<0.005	1	<0.005	<0.005	<0.005	0.642
EX-1	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0022	<0.0005	0.0008	<0.01	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	0.0108
EX-1	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0009	<0.0005	0.0028	<0.01	<0.0005	0.0049	<0.0005	<0.0005	<0.0005	0.07
EX-1	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.033
EX-1	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0081
EX-1	05-May-04	<0.0005	<0.0005	<0.0005	<0.01	0.016	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-1	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.001	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0042
EX-1	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-1	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0011 J
EX-1	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J
EX-1	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0021
EX-1	26-Oct-05	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0004 J	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
EX-1	18-Dec-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
EX-1	15-Apr-97	<0.5	<0.5	na	<0.5	<0.5	na	na	na	<5	na	<1	<1	<1	na	na	na
EX-1	01-Jul-97	<0.1	<0.1	na	<0.1	<0.1	na	na	na	<1	na	<0.2	<0.2	<0.2	na	na	na
EX-1	22-Sep-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
EX-1	18-Dec-97	<0.03	<0.03	na	<0.03	<0.03	na	na	na	<0.3	na	<0.05	<0.05	<0.05	na	na	na
EX-1	27-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.039	0.016	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	0.0066	<0.001
EX-1	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0012	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-1	17-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0022	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-1	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0029	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-1	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0009 J11	<0.001	<0.005	<0.001	0.0026	<0.001	<0.001	<0.001	<0.001	<0.001
EX-1	23-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	0.0011	<0.001	<0.001	<0.001	<0.001	<0.001
EX-1	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0065	0.0033	<0.01	<0.0005	0.013	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	13-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	25-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	26-Apr-00	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.017	<0.0008	0.28	<0.0017	<0.0017	<0.0017	<0.0008	<0.0008
EX-1	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0013	0.0006	<0.01	<0.0005	0.0011	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	16-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	21-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0007	<0.0005
DUP	21-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	<0.0005
EX-1	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0011	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0011	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	12-Dec-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.043	0.016	0.043	<0.0005	0.0027	<0.001	<0.001	<0.001	0.0023	0.0007
EX-1	13-Jan-03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.066	0.02	0.4	<0.005	<0.005	<0.01	<0.01	<0.01	<0.005	<0.005
EX-1	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0036	0.0017	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.008	0.0029	<0.01	<0.0005	0.0044	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0027	0.0059	<0.01	<0.0005	0.0006	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0015	0.0038	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	05-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0016	0.0012	<0.01	<0.0005	0.0007	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	0.0005 J	<0.01	<0.0005	0.0004 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
EX-1	18-Dec-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
EX-1	15-Apr-97	na	na	na	<0.5	na	na	<5	na	na	na	<0.5
EX-1	01-Jul-97	na	na	na	<0.1	na	na	<1	na	na	na	<0.1
EX-1	22-Sep-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
EX-1	18-Dec-97	na	na	na	<0.03	na	na	<0.3	na	na	na	<0.03
EX-1	27-Feb-98	<0.001	0.005	0.0068	<0.001	0.0011	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
EX-1	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
EX-1	17-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	na	<0.001	<0.002	<0.001	<0.001
EX-1	23-Oct-98	<0.001	<0.001	0.008	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
EX-1	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0006 J11	na	<0.001	<0.002	<0.001	<0.001
EX-1	23-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
EX-1	16-Jul-99	<0.0005	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-1	13-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
EX-1	25-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	26-Apr-00	<0.0008	<0.0008	<0.0017	<0.0008	<0.0008	<0.0008	<0.017	<0.0008	<0.0008	<0.0008	<0.0008
EX-1	26-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	09-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	16-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	16-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0014	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-1	03-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0006	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-1	16-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.001	<0.01	<0.0005	0.0017	<0.0005	<0.0005
EX-1	21-Jan-02	<0.0005	0.0006	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	21-Jan-02	<0.0005	0.0006	<0.001	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	09-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	09-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	09-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0007	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	12-Dec-02	0.0009	0.0026	0.0036	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	13-Jan-03	<0.005	<0.005	<0.02	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005
EX-1	16-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	07-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	29-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
EX-1	23-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
EX-1	05-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0007	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	14-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-1	11-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	21-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	20-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	22-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	26-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
EX-1	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0005	0.0006	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0013
DUP	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0005	0.0006	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0013
EX-1	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	0.0009	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	0.0032
EX-10	11-Sep-98	<0.01	0.028	<0.01	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	0.041	<0.05	<0.01	0.15	<0.01	<0.01	<0.01	0.047
EX-10	22-Oct-98	<0.002	0.041	<0.002	<0.01	<0.01	<0.002	<0.002	<0.002	<0.002	0.049	<0.01	<0.002	0.13	<0.002	<0.002	<0.002	0.042
EX-10	14-Jan-99	<0.001	0.034	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0012	0.0015	<0.005	<0.001	0.0016	<0.001	0.0008 J11	<0.001	0.0034
EX-10	23-Apr-99	<0.001	0.0081	<0.001	<0.005	<0.005	0.0009 J11	<0.001	<0.001	0.002	0.0015	<0.005	<0.001	0.0005 J11	0.0012	<0.001	<0.001	0.012 J11
EX-10	15-Jul-99	<0.0005	0.015	<0.0005	<0.01	<0.01	0.0006	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.001
EX-10	15-Oct-99	<0.0005	0.093	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-10	12-Jan-00	<0.0005	0.0094	<0.0005	<0.01	<0.01	0.0008	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	0.0011	<0.0005	<0.0005	0.0022
EX-10	26-Apr-00	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005
EX-10	26-Jul-00	<0.0005	0.0067	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	0.0017	0.0009	<0.0005	0.0015
EX-10	09-Oct-00	<0.0005	0.0068	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.001
EX-10	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0016	0.0008	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	0.016
EX-10	16-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0028	<0.0005	<0.0005	0.0008	0.0007	<0.01	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0556
EX-10	03-Jul-01	<0.0005	0.0021	<0.0005	<0.01	0.02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-10	16-Oct-01	<0.0005	0.0088	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-10	16-Jan-02	<0.0005	0.0014	<0.0005	<0.01	<0.01	0.001	0.0006	<0.0005	0.0008	0.0011	<0.01	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	0.0099
DUP	16-Jan-02	<0.0005	0.0011	<0.0005	<0.01	<0.01	0.0009	0.0005	<0.0005	0.0007	0.0009	<0.01	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	0.0082
EX-10	09-Apr-02	<0.0005	0.0039	<0.0005	<0.01	<0.01	0.0009	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	0.01
EX-10	09-Jul-02	<0.0005	0.0024	<0.0005	<0.01	<0.01	0.0012	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	0.0011	<0.0005	<0.0005	<0.0098
EX-10	07-Nov-02	<0.0005	0.0059	<0.0005	<0.01	<0.01	0.0009	0.0006	0.0082	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0099
EX-10	13-Jan-03	<0.0005	0.002	<0.0005	<0.01	<0.01	0.0015	0.0007	<0.0005	0.0007	0.001	<0.01	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	0.0055
EX-10	14-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.002	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	0.0338
EX-10	07-Jul-03	<0.0005	0.018	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.001
DUP	07-Jul-03	<0.0005	0.018	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-10	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0007	0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0018
EX-10	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0014	<0.0005	<0.0005	0.0008	0.0005	<0.01	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	0.014
EX-10	06-May-04	<0.0005	0.0041	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0025
EX-10	14-Jul-04	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	0.0024
DUP	14-Jul-04	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0028
EX-10	21-Jan-05	<0.0005	0.0007	<0.0005	<0.01	<0.01	0.001	0.0008	<0.0005	0.0007	0.0006	<0.01	<0.0005	0.0003 J	0.0006	<0.0005	<0.0005	0.0123 J
EX-10	20-Apr-05	<0.0005	0.002	<0.0005	<0.01	<0.01	0.0007	0.0005 J	<0.0005	0.0005	0.0003 J	<0.01	<0.0005	<0.0005	0.0005 J	<0.0005	<0.0005	0.013
EX-10	22-Jul-05	<0.0005	0.0053	<0.0005	<0.01	<0.01	0.0007	0.0005 J	<0.0005	0.0007	0.0003 J	<0.01	<0.0005	0.0081	0.0006	<0.0005	<0.0005	0.0071 J
DUP	22-Jul-05	<0.0005	0.0052	<0.0005	<0.01	<0.01	0.0006	0.0004 J	<0.0005	0.0007	0.0003 J	<0.01	<0.0005	0.0073	0.0005	<0.0005	<0.0005	0.0064 J
EX-10	26-Oct-05	<0.0005	0.0044	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005 J	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
EX-10	27-Jan-06	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	0.0009	0.0006	<0.0005	0.0006	0.0005 J	<0.01	<0.0005	<0.0005	0.0005 J	<0.0005	<0.0005	0.0087 J
DUP	27-Jan-06	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	0.001	0.0005	<0.0005	0.0007	0.0004 J	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	0.0097 J
EX-10	20-Apr-06	<0.0005	0.0006	<0.0005	<0.01	<0.01	0.001	0.0006	<0.0005	0.0005 J	0.0004 J	<0.01	<0.0005	<0.0005	0.0005 J	<0.0005	<0.0005	0.0154 J

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
EX-1	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005 J	0.0003 J	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-1	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	0.0003 J	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-10	11-Sep-98	<0.01	<0.01	<0.01 UJ3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	0.016	<0.01
EX-10	22-Oct-98	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	0.016	0.0043
EX-10	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	0.0006 J11	<0.001	<0.001	<0.001	0.0005 J11	<0.001
EX-10	23-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0026	0.0009 J11	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0029	0.0016
EX-10	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-10	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-10	12-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-10	26-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.066	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-10	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-10	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-10	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0025	0.0017	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.003	0.0031
EX-10	16-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0054	0.003	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0059	<0.0005
EX-10	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0025	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-10	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-10	16-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0011	0.0008	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0021	0.019
DUP	16-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	0.0006	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0018	0.015
EX-10	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0033	0.002	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0022	<0.0005
EX-10	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0031	<0.0016	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0018	<0.0012
EX-10	07-Nov-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	0.0008	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0009	<0.0005
EX-10	13-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0054	0.0031	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0034	0.0024
EX-10	14-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.013	0.0062	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0073	0.0056
EX-10	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-10	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0019	0.001	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0015	<0.0012
EX-10	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.011	0.0054	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0026	<0.0034
EX-10	06-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0018	0.0009	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0011	0.001
EX-10	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0014	0.0007	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0007	<0.0005
DUP	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0016	0.0009	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	0.0006
EX-10	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0068	0.0052	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0059	0.0068
EX-10	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0043	0.0036	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0032	<0.0005
EX-10	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0022	0.0016	<0.01	<0.0005	0.0006	<0.001	<0.001	<0.001	0.002	<0.0005
DUP	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0019	0.0014	<0.01	<0.0005	0.0005	<0.001	<0.001	<0.001	0.0018	<0.0005
EX-10	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0003 J	0.0004 J
EX-10	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0038	0.0033	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.005	<0.0005
DUP	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.004	0.0036	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0051	<0.0005
EX-10	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0059	0.0044	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0042	0.0034

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
EX-1	27-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0009	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	27-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0008	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-1	20-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	11-Sep-98	<0.01	0.014	0.015	0.011	<0.01	<0.01	na	<0.01 UJ3	<0.02	<0.01	<0.01
EX-10	22-Oct-98	0.005	0.017	0.017	<0.002	0.007	<0.002	na	<0.002	<0.004	<0.002	<0.002
EX-10	14-Jan-99	<0.001	<0.001	0.0006 J11	<0.001	0.0007 J11	0.0009 J11	na	<0.001	0.001 J11	<0.001	<0.001
EX-10	23-Apr-99	<0.001	0.0018	0.002	<0.001	0.0032	0.0016	na	<0.001	<0.002	<0.001	<0.001
EX-10	15-Jul-99	<0.0005	<0.0005	0.0005	<0.0005	0.0007	0.0009	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-10	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0023	<0.0005	<0.0005
EX-10	12-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	0.001	0.0012	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	26-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	26-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0011	0.0016	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	09-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	0.0008	0.0014	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	16-Jan-01	<0.0005	0.0012	0.0021	<0.0005	0.0051	0.0026	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	16-Apr-01	0.0006	0.0021	0.0049	<0.0005	0.0086	0.0031	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	03-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	16-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0009	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-10	16-Jan-02	<0.0005	0.0009	0.0017	<0.0005	0.0026	0.0016	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	16-Jan-02	<0.0005	0.0008	0.0015	<0.0005	0.0021	0.0011	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	09-Apr-02	<0.0005	0.0008	0.002	<0.0005	0.0025	0.0016	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	09-Jul-02	<0.0005	<0.0007	<0.002	<0.0005	0.0021	0.0018	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	07-Nov-02	<0.0005	<0.0005	<0.002	<0.0005	0.0009	0.001	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	13-Jan-03	<0.0008	0.0015	<0.0034	<0.0005	0.0038	0.002	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	14-Apr-03	0.001	0.0043	0.0052	<0.0005	0.0085	0.0033	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	07-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
DUP	07-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
EX-10	29-Oct-03	0.0006	0.001	0.002	<0.0005	0.0018	0.0013	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	23-Jan-04	0.0013	0.0014	0.0065	<0.0005	0.0035	0.0024	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	06-May-04	<0.0005	0.0006	<0.002	<0.0005	0.0018	0.0011	<0.01	<0.0005	0.0005	<0.0005	<0.0005
EX-10	14-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	0.0009	0.0016	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	14-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	0.001	0.0017	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	21-Jan-05	0.0008	0.0035	0.0043	<0.0005	0.0084	0.0025	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	20-Apr-05	0.0005 J	0.0016	0.0031	<0.0005	0.004	0.0018	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	22-Jul-05	<0.0005	0.001	0.0017 J	<0.0005	0.0023	0.0012	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
DUP	22-Jul-05	<0.0005	0.0009	0.0017 J	<0.0005	0.0022	0.0012	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
EX-10	26-Oct-05	<0.0005	<0.0005	0.001 J	<0.0005	0.0005	0.0004 J	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
EX-10	27-Jan-06	0.0007	0.0023	0.0034	<0.0005	0.0068	0.0024	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	27-Jan-06	0.0007	0.0024	0.0039	<0.0005	0.0068	0.0025	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	20-Apr-06	0.0007	0.002	0.0056	<0.0005	0.0059	0.0027	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
EX-10	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0006	0.0006	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	0.0025 J
EX-10	18-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0004 J	<0.0005	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
EX-10	17-Apr-09	<0.0005	0.0011	<0.0005	<0.01	<0.01	0.0003 J	0.0006	<0.0005	0.0005 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-10	30-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0003 J	0.0007	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
EX-11	16-Jul-99	<0.0005	0.04	<0.0005	<0.01	<0.01	0.0028	<0.0005	<0.0005	<0.0005	0.013	0.015	<0.0005	0.0046	<0.0005	<0.0005	<0.0005	0.0189
EX-12	02-Jun-99	<0.001	0.0084	<0.001	<0.005	<0.005	<0.0005	<0.001	<0.001	0.0023	<0.001	<0.005	0.0015	<0.001	<0.001	0.011	<0.0005	<0.002
DUP	02-Jun-99	<0.001	0.0085	<0.001	<0.005	<0.005	<0.0005	<0.001	<0.001	0.0024	<0.001	<0.005	0.0015	<0.001	<0.001	0.011	<0.0005	<0.002
EX-12	13-Jul-99	<0.0005	0.044	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.005	<0.0005	<0.01	0.0009	<0.0005	0.0017	0.011	<0.0005	<0.001
EX-12	25-Oct-99	<0.0005	0.0089	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	0.0016	<0.0005	<0.0005	0.01	<0.0005	<0.001
EX-13	02-Jun-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.0005	0.0033	<0.001	0.0007 J	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.002
EX-13	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0026	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-14	08-Oct-99	<0.0005	0.002	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	0.001	<0.0005	<0.0005	0.0022	<0.0005	0.0008
DUP	08-Oct-99	<0.0005	0.002	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	0.001	<0.0005	<0.0005	0.002	<0.0005	0.0008
EX-14	25-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.001
EX-14	26-Apr-00	<0.0005	0.0006	<0.0005	<0.01	0.012	<0.0005	<0.0005	<0.0005	<0.0005	0.0076	<0.01	<0.0005	0.053	<0.0005	<0.0005	<0.0005	0.014
EX-14	26-Jul-00	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	0.0008	<0.01	<0.0005	0.002	<0.0005	0.0011	<0.0005	0.0025
EX-14	09-Oct-00	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	0.0008
EX-14	16-Jan-01	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.001
DUP	16-Jan-01	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.001
EX-14	13-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.001
EX-14	03-Jul-01	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.001
EX-14	12-Oct-01	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.001
EX-14	17-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.001
EX-14	09-Apr-02	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-14	10-Jul-02	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-14	18-Dec-02	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0014	0.0006	0.0022	<0.01	<0.0005	0.0011	<0.0005	0.0016	<0.0005	0.0054
EX-14	14-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0016	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	0.001
EX-14	14-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.001
EX-14	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	0.0012
EX-14	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-14	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-14	06-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001
EX-14	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	0.077	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.32	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-14	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-14	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.001
EX-14	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.001
EX-14	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.001
EX-14	26-Oct-05	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.002	<0.0005	<0.01	<0.0005	<0.0005	0.0005	0.0005	<0.0005	<0.001
DUP	26-Oct-05	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.002	<0.0005	<0.01	<0.0005	<0.0005	0.0006	0.0006	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
EX-10	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0011	0.0017	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0027	0.003
EX-10	18-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0011	0.0019
EX-10	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0016	<0.0005
EX-10	30-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0017	<0.0005
EX-11	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.013	0.0034	0.2	<0.0005	0.16	<0.001	<0.001	<0.001	0.0005	<0.0005
EX-12	02-Jun-99	<0.0005	<0.001	<0.0095	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	02-Jun-99	<0.0005	<0.001	<0.0095	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-12	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002	<0.0005	<0.01	<0.0005	0.016	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-12	25-Oct-99	<0.0005	0.0018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-13	02-Jun-99	<0.0005	<0.001	<0.0097	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-13	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	0.022	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	08-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.003	0.0007	<0.01	<0.0005	0.09	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	08-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.003	0.0007	<0.01	<0.0005	0.084	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	25-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	26-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	0.19	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	0.0072	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0026	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	13-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0019	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0038	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0021	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	17-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	10-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	18-Dec-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0023	0.0006	<0.01	<0.0005	0.019	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	14-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	14-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	0.048	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	06-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0019	0.0005	<0.01	<0.0005	0.016	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	0.082	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0017	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	0.0026	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0029	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0028	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
EX-10	17-Apr-07	0.0006	0.0008	0.0028	<0.0005	0.0053	0.0026	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	18-Apr-08	0.0004 J	0.0003 J	0.0017 J	<0.0005	0.0025	0.0026	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	17-Apr-09	0.0004 J	0.0004 J	<0.002	<0.0005	0.0047	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-10	30-Apr-10	0.0003 J	0.0003 J	<0.002	<0.0005	0.0059	0.0025	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-11	16-Jul-99	<0.0005	0.0008	0.0027	0.0017	<0.0005	<0.0005	<0.01	<0.0005	0.0032	<0.0005	<0.0005
EX-12	02-Jun-99	<0.001	<0.001	<0.0095	<0.001	<0.001	<0.001	na	<0.0095	0.001 J	<0.001	<0.001
DUP	02-Jun-99	<0.001	<0.001	<0.0095	<0.001	<0.001	<0.001	na	<0.0095	0.001 J	<0.001	<0.001
EX-12	13-Jul-99	<0.0005	<0.0005	0.0007	0.0006	<0.0005	<0.0005	<0.01	<0.0005	0.0028	<0.0005	<0.0005
EX-12	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
EX-13	02-Jun-99	<0.001	<0.001	<0.0097	<0.001	<0.001	<0.001	na	<0.0097	<0.002	<0.001	<0.001
EX-13	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	08-Oct-99	<0.0005	<0.0005	0.0006	0.001	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
DUP	08-Oct-99	<0.0005	<0.0005	0.0006	0.001	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
EX-14	25-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
EX-14	26-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-14	26-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
EX-14	09-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-14	16-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	16-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	13-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	03-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-14	12-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	17-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	09-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	10-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-14	18-Dec-02	<0.0005	<0.0005	0.011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	14-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	14-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	07-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	29-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	23-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	06-May-04	<0.0005	<0.0005	0.004	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	14-Jul-04	<0.0005	<0.0005	0.004	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	14-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	21-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	20-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	22-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-14	26-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
DUP	26-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
EX-14	27-Jan-06	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.001
EX-14	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	0.0006	<0.001
EX-15	25-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0022	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0025	<0.001
EX-15	26-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	26-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	26-Jul-00	<0.0005	<0.5	<0.5	<10	27	<0.5	0.6	<0.5	0.7	6.6	<10	<0.5	14	<0.5	<0.5	1.0	23
EX-15	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	<0.0005	0.0018	<0.01	<0.0005	0.002	<0.0005	<0.0005	<0.0005	0.0087
EX-15	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	0.0016
EX-15	13-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0019
EX-15	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0009	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	17-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007
EX-15	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	18-Dec-02	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	0.0007	0.0009	0.0009	0.0048	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	0.0064
EX-15	13-Jan-03	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	0.0007	0.0025	0.0009	0.0047	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	0.0044
EX-15	14-Apr-03	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	0.0009	0.0012	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0023
EX-15	07-Jul-03	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	29-Oct-03	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	0.0009	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006
EX-15	23-Jan-04	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	06-May-04	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	0.0009	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001
EX-15	14-Jul-04	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	14-Oct-04	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	21-Jan-05	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	0.0004 J	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	20-Apr-05	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	22-Jul-05	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	26-Oct-05	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	27-Jan-06	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-15	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-16	25-Jan-00	<0.05	<0.05	<0.05	<1	14	0.12	<0.05	<0.05	<0.05	0.79	4	<0.05	13	<0.05	<0.05	<0.05	3.13
EX-16	26-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	0.018	0.0072	<0.0005	<0.0005	0.0009	<0.0005	0.011	<0.0005	0.0054	<0.0005	<0.0005	<0.0005	0.151
EX-16	26-Jul-00	<0.0025	<0.0025	<0.0025	<0.05	0.61	0.0046	<0.0025	<0.0025	<0.0025	<0.0025	0.082	<0.0025	0.029	<0.0025	<0.0025	<0.0025	0.121
EX-16	09-Oct-00	<0.005	<0.005	<0.005	<0.1	1.5	<0.005	<0.005	<0.005	<0.005	<0.005	0.28	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
EX-16	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	0.013	0.0023	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	0.0134
EX-16	13-Apr-01	<0.0063	<0.0063	<0.0063	<0.13	1.9	0.015	<0.0063	<0.0063	<0.0063	0.15	0.61	<0.0063	0.099	<0.0063	<0.0063	<0.0063	0.4178
EX-16	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	0.13	0.0068	0.0006	<0.0005	0.0006	0.051	0.046	<0.0005	0.014	<0.0005	0.0006	<0.0005	0.0847
EX-16	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	0.16	0.011	<0.0005	<0.0005	0.0007	0.16	0.071	<0.0005	0.13	<0.0005	<0.0005	<0.0005	0.3172
EX-16	16-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	0.028	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.018
EX-16	12-Apr-02	<0.0036	<0.0036	<0.0036	<0.071	0.83	0.045	<0.0036	<0.0036	<0.0036	0.085	0.24	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	0.066

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-pentanone	Bromobenzene	Carbon Disulfide	Chloroethane	Chloromethane	Dichlorodifluoromethane	Isopropylbenzene	n-Butylbenzene
EX-14	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-14	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	25-Jan-00	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	26-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	26-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	26-Jul-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6.2	1.4	<10	<0.5	31	<1.0	<1.0	<1.0	<0.5	<0.5
EX-15	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0033	0.0008	<0.01	<0.0005	0.029	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	13-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	0.0011	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	0.0056	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0022	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	17-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0025	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	0.0019	<0.001	<0.0005	<0.0005
EX-15	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	18-Dec-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	0.0013	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	13-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	0.0007	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	14-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	0.0079	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.012	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0047	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	06-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0022	0.0005	<0.01	<0.0005	0.02	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-15	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-16	25-Jan-00	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.34	0.096	3.2	<0.05	<0.05	<0.1	<0.1	<0.1	<0.05	<0.05
EX-16	26-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.017	0.013	0.027	<0.0005	0.041	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-16	26-Jul-00	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.021	0.0064	0.14	<0.0025	0.051	<0.005	<0.005	<0.005	<0.0025	<0.0025
EX-16	09-Oct-00	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.01	<0.01	<0.01	<0.005	<0.005
EX-16	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0025	0.011	<0.01	<0.0005	0.0058	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-16	13-Apr-01	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	0.14	0.035	0.17	<0.0063	<0.0063	<0.013	<0.013	<0.013	<0.0063	<0.0063
EX-16	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.041	0.0078	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0037	0.0009
EX-16	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.059	0.012	0.01	<0.0005	0.0027	<0.001	<0.001	<0.001	0.0052	0.0006
EX-16	16-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0093	0.028	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	0.0008
EX-16	12-Apr-02	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	0.022	0.0042	0.21	<0.0036	<0.0036	<0.0071	<0.0071	<0.0071	<0.0036	<0.0036

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
EX-14	27-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
EX-14	20-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
EX-15	25-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-15	26-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	26-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-15	26-Jul-00	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5
EX-15	09-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-15	16-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-15	13-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-15	03-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-15	12-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
EX-15	17-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-15	09-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-15	09-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-15	18-Dec-02	<0.0005	<0.0005	0.0076	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-15	13-Jan-03	<0.0005	<0.0005	<0.0038	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-15	14-Apr-03	<0.0005	0.0006	<0.002	<0.0005	0.0007	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-15	07-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-15	29-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-15	23-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-15	06-May-04	<0.0005	<0.0005	0.0088	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-15	14-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-15	14-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-15	21-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
EX-15	20-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
EX-15	22-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
EX-15	26-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
EX-15	27-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
EX-15	20-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-16	25-Jan-00	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.05	<0.05
EX-16	26-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-16	26-Jul-00	<0.0025	<0.0025	<0.005	<0.0025	<0.0025	<0.0025	<0.05	<0.0025	<0.0025	<0.0025	<0.0025
EX-16	09-Oct-00	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005
EX-16	16-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-16	13-Apr-01	<0.0063	0.0087	<0.013	<0.0063	<0.0063	<0.0063	<0.13	<0.0063	<0.0063	<0.0063	<0.0063
EX-16	03-Jul-01	<0.0005	0.0054	0.0016	<0.0005	0.001	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
EX-16	12-Oct-01	<0.0005	0.0055	0.0029	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-16	16-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-16	12-Apr-02	<0.0036	0.0043	<0.0071	<0.0036	<0.0036	<0.0036	<0.071	<0.0036	<0.0036	<0.0036	<0.0036

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
DUP	12-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	0.53	0.047	<0.0005	<0.0005	0.0017	0.067	0.18	<0.0005	0.0017	<0.0005	0.0016	<0.0005	0.036
EX-16	09-Jul-02	<0.001	<0.001	<0.001	<0.02	<0.4	0.038	<0.001	<0.001	0.0018	<0.033	<0.1	<0.001	0.0022	<0.001	0.0015	<0.001	<0.0082
EX-16	07-Nov-02	<0.005	<0.005	<0.005	<0.1	1.5	0.01	<0.005	<0.005	<0.005	0.12	0.35	<0.005	0.097	<0.005	<0.005	<0.005	0.188
DUP	07-Nov-02	<0.005	<0.005	<0.005	<0.1	1.6	0.011	<0.005	<0.005	<0.005	0.12	0.37	<0.005	0.099	<0.005	<0.005	<0.005	0.177
EX-16	14-Jan-03	<0.0013	<0.0013	<0.0013	<0.025	0.084	0.0038	<0.0013	0.0014	<0.0013	0.36	<0.025	<0.0013	0.016	<0.0013	<0.0013	<0.0013	0.293
EX-16	14-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	0.44	0.011	<0.0005	<0.0005	0.0006	0.1	0.11	<0.0005	0.13	<0.0005	<0.0005	<0.0005	0.106
EX-16	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0058	<0.0005	0.0005	<0.0005	0.04	<0.01	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	0.0127
EX-16	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0022	<0.01	<0.0005	0.0018	<0.0005	<0.0005	<0.0005	0.0017
EX-16	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	0.48	0.0091	<0.0005	<0.0005	0.0007	0.053	0.14	<0.0005	0.1	<0.0005	<0.0005	<0.0005	0.0429
EX-16	06-May-04	<0.0005	<0.0005	<0.0005	<0.01	0.014	0.0029	<0.0005	<0.0005	0.0006	0.014	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	0.01
DUP	06-May-04	<0.0005	<0.0005	<0.0005	<0.01	0.011	0.0026	<0.0005	<0.0005	0.0006	0.013	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	0.01
EX-16	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	0.018	0.0035	<0.0005	<0.0005	0.0008	0.019	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	0.0064
EX-16	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	0.017	0.0018	<0.0005	<0.0005	0.0008	0.011	<0.01	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	0.004
EX-16	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	0.072	0.0037	0.0003 J	<0.0005	0.0008	0.0078	0.01	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	0.0036 J
EX-16	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0025	0.0003 J	<0.0005	0.0008	0.008	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0013
EX-16	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0022	0.0003 J	<0.0005	0.001	0.0049	<0.01	<0.0005	0.0021	<0.0005	<0.0005	<0.0005	0.0007
EX-16	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0008	0.0003 J	<0.0005	0.001	0.0023	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005
EX-16	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	0.094	0.0028	<0.0005	<0.0005	0.0007	0.0068	0.015	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	0.0033
DUP	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	0.094	0.0029	<0.0005	<0.0005	0.0007	0.0069	0.016	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	0.0035
EX-16	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	0.14	0.005	0.0003 J	<0.0005	0.0009	0.031	0.03	<0.0005	0.0053	<0.0005	<0.0005	<0.0005	0.0223
EX-2	18-Apr-96	<0	<3	<3	<30	<50	0.11	<3	<3	<3	8	<50	<3	24	<3	<3	<5	7.7
EX-2	01-Aug-96	<0	<0.5	<0.5	<5	<10	<0.5	<0.5	<0.5	<0.5	0.65	<10	<0.5	6.6	<0.5	<0.5	<1	3.7
EX-2	18-Dec-96	<0	<1	<1	<10	<20	<1	<1	<1	<1	2.5	<20	<1	23	<1	<1	<2	12
EX-2	15-Apr-97	<0	<3	<3	<30	<50	<3	<3	<3	<3	<3	<50	<3	26	<3	<3	<5	10
EX-2	01-Jul-97	<0	<1	<1	<10	<30	<1	<1	<1	<1	2	<30	<1	27	<1	<1	<3	10
EX-2	22-Sep-97	<0	<1	<1	<10	<30	<1	<1	<1	<1	1.8	<30	<1	21	<1	8.2	<3	8.4
EX-2	22-Dec-97	<0	<0.5	<0.5	<5	<10	<0.5	<0.5	<0.5	<0.5	1.6	<10	<0.5	8.3	<0.5	<0.5	<1	6.6
EX-2	02-Mar-98	<0	<0.1	<0.1	<2	<2	<0.1	<0.1	<0.1	<0.1	1.1	<2	<0.1	7.7	<0.1	<0.1	<0.2	4.8
EX-2	09-Apr-98	<0	<0.05	<0.05	<0.25	<0.25	<0.05	<0.05	<0.05	<0.05	0.52	<0.25	<0.05	8.1	<0.05	<0.05	<0.05	4
EX-2	17-Jul-98	<0.25	<0.25	<0.25	<1.2	<1.2	<0.25	<0.25	<0.25	<0.25	<0.25	<1.2	<0.25	4.2	<0.25	<0.25	<0.25	4.4
EX-2	23-Oct-98	<0.0025	<0.0025	<0.0025	<0.012	<0.012	0.0032	<0.0025	<0.0025	<0.0025	0.031	<0.012	<0.0025	0.13	<0.0025	<0.0025	<0.0025	0.24
EX-2	14-Jan-99	<0.1	<0.1	<0.1	<0.5	<0.5	0.059 J11	<0.1	<0.1	<0.1	1.2	<0.5	<0.1	11	<0.1	<0.1	<0.1	6.4
EX-2	23-Apr-99	<0.013	<0.013	<0.013	<0.063	<0.068 U6	0.0069 J11	<0.013	<0.013	0.0081 J11	0.17	<0.063	<0.013	1.6	<0.013	<0.013	<0.013	2.61
EX-2	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	0.0071	<0.01	<0.0005	0.0098	<0.0005	<0.0005	<0.0005	0.059
EX-2	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0009	<0.0005	<0.0005	0.0021	0.0074	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.026
EX-2	12-Jan-00	<0.0005	0.057	<0.0005	<0.01	0.018	0.0005	<0.0005	<0.0005	0.0032	<0.0005	<0.01	<0.0005	0.0058	0.002	0.0044	<0.0005	0.091
EX-2	26-Apr-00	<0.0025	<0.0025	<0.0025	<0.05	2.5	0.0041	<0.0025	<0.0025	0.004	0.55	<0.05	<0.0025	0.081	<0.0025	<0.0025	<0.0025	1.15
EX-2	26-Jul-00	<0.005	<0.005	<0.005	<0.1	0.25	<0.005	<0.005	<0.005	<0.005	0.0094	<0.1	<0.005	0.19	<0.005	<0.005	<0.005	3.33
DUP	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	0.26 J	0.0035	<0.0005	<0.0005	0.0067	0.015	<0.01	0.001	0.2	<0.0005	0.002	0.0012	3.64

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
DUP	12-Apr-02	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.016	0.003	0.16	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0027	<0.0005
EX-16	09-Jul-02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0022	<0.001	<0.091	<0.001	<0.001	<0.002	<0.002	<0.002	0.002	<0.001
EX-16	07-Nov-02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.077	0.026	0.18	<0.005	0.029	<0.01	<0.01	<0.01	0.0057	<0.005
DUP	07-Nov-02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.078	0.026	0.19	<0.005	0.031	<0.01	<0.01	<0.01	0.0058	<0.005
EX-16	14-Jan-03	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.64	0.19	<0.025	<0.0013	<0.0013	<0.0025	<0.0025	<0.0025	0.045	0.0094
EX-16	14-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.15	0.039	0.054	<0.0005	0.0021	<0.001	<0.001	<0.001	0.012	<0.0005
EX-16	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.075	0.011	<0.01	<0.0005	0.023	<0.001	<0.001	<0.001	0.0058	<0.0005
EX-16	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.34	<0.001	<0.001	<0.001	0.0009	<0.0005
EX-16	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.059	0.013	0.084	<0.0005	0.0008	<0.001	<0.001	<0.001	0.005	<0.0005
EX-16	06-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.013	0.0026	<0.01	<0.0005	0.032	<0.001	<0.001	<0.001	0.0012	<0.0005
DUP	06-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.013	0.0027	<0.01	<0.0005	0.03	<0.001	<0.001	<0.001	0.0013	<0.0005
EX-16	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0052	0.0008	<0.01	<0.0005	0.0023	<0.001	<0.001	<0.001	0.0012	<0.0005
EX-16	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0069	0.0013	<0.01	<0.0005	0.0014	<0.001	<0.001	<0.001	0.0009	<0.0005
EX-16	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.012	0.0029	0.0063 J	<0.0005	0.0005 J	<0.001	<0.001	<0.001	0.0009	<0.0005
EX-16	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0049	<0.0005	<0.01	<0.0005	0.0027	<0.001	<0.001	<0.001	0.001	<0.0005
EX-16	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	0.0021	<0.001	<0.001	<0.001	0.0003 J	<0.0005
EX-16	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	0.0033	<0.001	<0.001	<0.001	0.0004 J	<0.0005
EX-16	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0093	0.001	0.0073 J	<0.0005	0.0006	<0.001	<0.001	<0.001	0.0011	<0.0005
DUP	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0098	0.0011	0.0078 J	<0.0005	0.0007	<0.001	<0.001	<0.001	0.0011	<0.0005
EX-16	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.013	0.0005 J	0.028	<0.0005	0.0012	<0.001	<0.001	<0.001	0.0017	0.0017
EX-2	18-Apr-96	<3	<3	<0.1	<3	<3	na	na	na	<30	na	<5	<5	<5	na	na	na
EX-2	01-Aug-96	<0.5	<0.5	na	<0.5	<0.5	na	na	na	<5	na	<1	<1	<1	na	na	na
EX-2	18-Dec-96	<1	<1	na	<1	<1	na	na	na	<10	na	<2	<2	<2	na	na	na
EX-2	15-Apr-97	<3	<3	na	<3	<3	na	na	na	<30	na	<5	<5	<5	na	na	na
EX-2	01-Jul-97	<1	<1	na	<1	<1	na	na	na	<10	na	<3	<3	<3	na	na	na
EX-2	22-Sep-97	<1	<1	na	<1	<1	na	na	na	<10	na	<3	<3	<3	na	na	na
EX-2	22-Dec-97	<0.5	<0.5	na	<0.5	<0.5	na	na	na	<5	na	<1	<1	<1	na	na	na
EX-2	02-Mar-98	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.51	0.14	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.1
EX-2	09-Apr-98	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.38	0.14	<0.25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
EX-2	17-Jul-98	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.39	<0.25	<1.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
EX-2	23-Oct-98	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.022	0.013	<0.012	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
EX-2	14-Jan-99	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.62	0.19	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
EX-2	23-Apr-99	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	0.42	0.14	<0.063	<0.013	<0.013	<0.013	<0.013	<0.013	0.01 J11	<0.013
EX-2	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0058	0.0041	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-2	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0032	0.0025	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-2	12-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.012	0.0052	<0.01	<0.0005	0.0015	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-2	26-Apr-00	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.28	0.11	<0.05	<0.0025	0.0028	<0.005	<0.005	<0.005	0.048	<0.0025
EX-2	26-Jul-00	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.61	0.19	<0.1	<0.005	<0.005	<0.01	<0.01	<0.01	<0.005	<0.005
DUP	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.59	0.21	<0.01	<0.0005	0.0028	<0.001	<0.001	<0.001	0.0015	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
DUP	12-Apr-02	<0.0005	0.0037	0.002	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-16	09-Jul-02	<0.001	<0.0014	<0.004	<0.001	<0.001	<0.001	<0.02	<0.001	0.001	<0.001	<0.001
EX-16	07-Nov-02	<0.005	0.0085	<0.02	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005
DUP	07-Nov-02	<0.005	0.0087	<0.02	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005
EX-16	14-Jan-03	<0.0053	0.11	0.017	<0.0013	0.0044	<0.0013	<0.025	<0.0013	<0.0013	<0.0013	<0.0013
EX-16	14-Apr-03	0.0027	0.029	0.0034	<0.0005	<0.0005	0.001	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-16	07-Jul-03	0.001	0.012	0.0025	<0.0005	0.0013	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-16	29-Oct-03	<0.0005	0.0007	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-16	23-Jan-04	0.0016	0.01	<0.017	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-16	06-May-04	<0.0005	0.0021	0.0036	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
DUP	06-May-04	<0.0005	0.0021	0.004	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
EX-16	14-Jul-04	<0.0005	0.0017	<0.002	<0.0005	0.0007	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-16	14-Oct-04	<0.0005	0.0018	<0.002	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-16	21-Jan-05	0.0004 J	0.0014	0.0012 J	<0.0005	0.0004 J	0.0004 J	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
EX-16	20-Apr-05	<0.0005	0.0015	0.001 J	<0.0005	0.0005 J	0.0003 J	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
EX-16	22-Jul-05	<0.0005	0.0003 J	<0.002	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
EX-16	26-Oct-05	<0.0005	0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
EX-16	27-Jan-06	<0.0005	0.0016	<0.002	<0.0005	0.0003 J	0.0004 J	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
DUP	27-Jan-06	<0.0005	0.0016	<0.002	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
EX-16	20-Apr-06	0.0003 J	0.0026	<0.002	<0.0005	0.0005	0.0003 J	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
EX-2	18-Apr-96	na	na	<0.1	<3	na	na	<30	<0.1	na	na	<3
EX-2	01-Aug-96	na	na	na	<0.5	na	na	<5	na	na	na	<0.5
EX-2	18-Dec-96	na	na	na	<1	na	na	<10	na	na	na	<1
EX-2	15-Apr-97	na	na	na	<3	na	na	<30	na	na	na	<3
EX-2	01-Jul-97	na	na	na	<1	na	na	<10	na	na	na	<1
EX-2	22-Sep-97	na	na	na	<1	na	na	<10	na	na	na	<1
EX-2	22-Dec-97	na	na	na	<0.5	na	na	<5	na	na	na	<0.5
EX-2	02-Mar-98	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1
EX-2	09-Apr-98	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	na	<0.05	<0.002	<0.05	<0.05
EX-2	17-Jul-98	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	na	<0.25	<0.5	<0.25	<0.25
EX-2	23-Oct-98	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0025	na	<0.0025	<0.005	<0.0025	<0.0025
EX-2	14-Jan-99	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	na	<0.1	<0.2	<0.1	<0.1
EX-2	23-Apr-99	<0.013	0.011 J11	0.011 J11	<0.013	<0.013	<0.013	na	<0.013	<0.025	<0.013	<0.013
EX-2	15-Jul-99	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	12-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0026	<0.0005	<0.0005
EX-2	26-Apr-00	0.0026	0.05	0.015	<0.0025	<0.0025	<0.0025	<0.05	<0.0025	<0.0025	<0.0025	<0.0025
EX-2	26-Jul-00	<0.02	<0.005	<0.01	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005
DUP	26-Jul-00	0.0035	<0.0005	0.011	<0.0005	<0.02	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.02

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
EX-2	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	0.018	0.0035	<0.0005	<0.0005	0.0053	0.13	<0.01	<0.0005	0.11	<0.0005	<0.0005	0.0035	0.47
EX-2	16-Jan-01	<0.0042	<0.0042	<0.0042	<0.083	<0.01	0.0052	<0.0042	<0.0042	<0.0042	0.63	<0.083	<0.0042	0.39	<0.0042	<0.0042	<0.0042	2.1
EX-2	16-Apr-01	<0.0008	<0.0008	<0.0008	<0.017	<0.017	0.0016	<0.0008	<0.0008	<0.0008	0.16	<0.017	<0.0008	0.016	<0.0008	<0.0008	<0.0008	0.361
EX-2	03-Jul-01	<0.0025	<0.0025	<0.0025	<0.05	<0.05	0.0088	<0.0025	<0.0025	0.0051	0.24	<0.05	<0.0025	0.31	<0.0025	<0.0025	<0.0025	1.69
EX-2	12-Oct-01	<0.0008	<0.0008	<0.0008	<0.017	<0.017	0.0053	<0.0008	<0.0008	0.0038	0.14	<0.017	0.0016	0.061	<0.0008	<0.0008	0.0013	0.53
EX-2	16-Jan-02	<0.005	<0.005	<0.005	<0.1	<0.1	0.0098	<0.005	<0.005	<0.005	0.88	<0.1	<0.005	1.2	<0.005	<0.005	<0.005	3.25
EX-2	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0014	<0.0005	<0.0005	0.0011	0.014	<0.01	<0.0005	0.12	<0.0005	<0.0005	0.0006	0.45
EX-2	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0028	<0.0005	<0.0005	0.0009	<0.075	<0.01	<0.0005	0.09	<0.0005	<0.0005	<0.0005	0.334
EX-2	08-Oct-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0032	<0.0005	<0.0005	0.0031	0.021	<0.01	0.0003 J	0.051	<0.0005	<0.0005	0.0009	0.49
EX-2	13-Jan-03	<0.0013	<0.0013	<0.0013	<0.025	<0.025	0.0053	<0.0013	<0.0013	0.0019	0.38	<0.025	<0.0013	0.061	<0.0013	<0.0013	<0.0013	0.79
EX-2	14-Apr-03	<0.0036	<0.0036	<0.0036	<0.071	<0.071	0.0069	<0.0036	0.02	<0.0036	0.1	<0.071	<0.0036	0.77	<0.0036	<0.0036	<0.0036	2.54
EX-2	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0051	<0.0005	<0.0005	0.0035	0.1	<0.01	<0.0005	0.014	<0.0005	<0.0005	0.0016	0.26
EX-2	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0024	<0.0005	<0.0005	0.0036	0.022	<0.01	<0.0005	0.0015	<0.0005	<0.0005	0.0014	0.091
EX-2	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0018	<0.0005	<0.0005	0.0012	0.071	<0.01	<0.0005	0.13	<0.0005	<0.0005	0.0006	0.49
EX-2	06-May-04	<0.0005	0.0012	<0.0005	<0.01	0.095	0.0005	<0.0005	<0.0005	0.0019	0.022	0.041	<0.0005	0.045	<0.0005	0.0006	<0.0005	0.161
EX-2	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	0.0019	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0049
EX-2	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0027	<0.0005	<0.0005	0.0035	0.084	<0.01	<0.0005	0.012	<0.0005	<0.0005	0.0011	0.252
EX-2	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	0.015	0.0021	0.0003 J	<0.0005	0.0013	0.068	<0.01	0.0005 J	0.18	<0.0005	0.0004 J	<0.0005	1.61
EX-2	20-Apr-05	<0.0071	<0.0071	<0.0071	<0.14	<0.14	<0.0071	<0.0071	<0.0071	<0.0071	0.33	<0.14	<0.0071	0.84	<0.0071	<0.0071	<0.0071	2.86
EX-2	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0005 J	0.0017	<0.0005	0.0007	0.003	<0.01	<0.0005	0.0004 J	0.0003 J	<0.0005	<0.0005	0.0063 J
EX-2	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0043	0.0077	<0.01	<0.0005	0.0007	<0.0005	<0.0005	0.0016	0.0301
EX-2	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.003	0.0007	<0.0005	0.0012	0.58	<0.01	0.0005 J	0.44	<0.0005	0.0003 J	<0.0005	1.94
EX-2	20-Apr-06	<0.0083	<0.0083	<0.0083	<0.17	<0.17	0.0047 J	<0.0083	<0.0083	<0.0083	0.71	<0.17	<0.0083	0.82	<0.0083	<0.0083	<0.0083	4.76
EX-3	18-Apr-96	<0	<0.3	<0.3	<3	<5	0.0009	<0.3	<0.3	<0.3	<0.3	<5	<0.3	<0.3	<0.3	<0.3	<0.5	<0.5
EX-3	01-Aug-96	<0	0.006	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
EX-3	18-Dec-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
EX-3	15-Apr-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
EX-3	01-Jul-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
EX-3	22-Sep-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	0.009	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
EX-3	19-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	0.017	<0.1	<0.005	0.05	<0.005	<0.005	<0.01	0.073
EX-3	02-Mar-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0017	<0.001	<0.02	<0.001	<0.001	<0.001	0.0015	<0.002	<0.002
EX-3	09-Apr-98	<0	0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0015	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011
EX-3	17-Jul-98	<0.001	0.0023	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0031	0.001	<0.005	<0.001	<0.001	0.0015	0.0017	<0.001	<0.001
EX-3	22-Oct-98	<0.001	0.0042	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0048	<0.001	<0.005	<0.001	<0.001	0.0028	0.0016	<0.001	<0.001
DUP	22-Oct-98	<0.001	0.004	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0043	<0.001	<0.005	<0.001	<0.001	0.0024	0.0014	<0.001	<0.001
EX-3	14-Jan-99	<0.001	0.0086	<0.001	<0.005	<0.005	<0.001	0.001	<0.001	0.004	<0.001	<0.005	<0.001	0.002	0.0024	0.0018	<0.001	<0.001
EX-3	23-Apr-99	<0.001	0.017	<0.001	<0.005	<0.005	0.0007 J11	0.0009 J11	<0.001	0.0037	0.0009 J11	<0.005	<0.001	0.0019	0.0023	0.0014	<0.001	0.0045 J11
EX-3	16-Jul-99	<0.0005	0.039	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	0.0037	<0.0005	<0.01	<0.0005	0.008	0.0021	0.0014	<0.0005	0.0049
EX-3	13-Oct-99	<0.0005	0.011	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	0.0062	<0.0005	<0.01	0.0011	0.0042	0.004	0.0017	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
EX-2	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.11	0.045	<0.01	<0.0005	0.0076	<0.001	<0.001	<0.001	0.0081	<0.0005
EX-2	16-Jan-01	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	0.6	0.18	<0.083	<0.0042	<0.0042	<0.0083	<0.0083	<0.0083	0.044	0.0052
EX-2	16-Apr-01	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.28	0.063	<0.017	<0.0008	<0.0008	<0.0017	<0.0017	<0.0017	0.042	<0.0008
EX-2	03-Jul-01	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.29	0.095	<0.05	<0.0025	<0.0025	<0.005	<0.005	<0.005	0.013	<0.0025
EX-2	12-Oct-01	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.063	0.043	<0.017	<0.0008	<0.0008	<0.0017	<0.0017	<0.0017	0.008	<0.0008
EX-2	16-Jan-02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.49	0.18	<0.1	<0.005	<0.005	<0.01	<0.01	<0.01	0.062	0.0064
EX-2	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.051	0.05	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	<0.0005
EX-2	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.07	<0.027	<0.01	<0.0005	<0.002	<0.001	<0.001	<0.001	0.0033	<0.0005
EX-2	08-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.044	0.034	<0.01	<0.0005	0.0003 J	<0.001	<0.001	<0.001	<0.0005	0.0024
EX-2	13-Jan-03	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.25	0.083	<0.025	<0.0013	<0.0013	<0.0025	<0.0025	<0.0025	0.028	<0.0013
EX-2	14-Apr-03	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	0.34	0.096	<0.071	<0.0036	<0.0036	<0.0071	<0.0071	<0.0071	0.0054	<0.0036
EX-2	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.13	0.024	<0.01	<0.0005	0.0095	<0.001	<0.001	<0.001	0.0036	<0.0005
EX-2	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.049	0.014	<0.01	<0.0005	0.0005	<0.001	<0.001	<0.001	0.0013	<0.0005
EX-2	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.059	0.052	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.004	<0.0005
EX-2	06-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.018	0.016	<0.01	<0.0005	0.0028	<0.001	<0.001	<0.001	0.0007	<0.0005
EX-2	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	0.0018	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-2	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.064	0.02	<0.01	<0.0005	0.0011	<0.001	<0.001	<0.001	0.0044	<0.0005
EX-2	21-Jan-05	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	0.26	0.1	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0044	<0.0005
EX-2	20-Apr-05	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	0.31	0.11	<0.14	<0.0071	<0.0071	<0.014	<0.014	<0.014	0.012	<0.0071
EX-2	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0019	0.001	<0.01	<0.0005	0.0005	<0.001	<0.001	<0.001	0.0005	<0.0005
EX-2	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.015	0.0047	<0.01	<0.0005	0.0009	<0.001	<0.001	<0.001	0.0008	<0.0005
EX-2	27-Jan-06	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	0.26	0.084	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.039	<0.0005
EX-2	20-Apr-06	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	0.63	0.19	<0.17	<0.0083	<0.0083	<0.017	<0.017	<0.017	0.023	<0.0083
EX-3	18-Apr-96	<0.3	<0.3	<0.01	<0.3	<0.3	na	na	na	<3	na	<0.5	<0.5	<0.5	na	na	na
EX-3	01-Aug-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
EX-3	18-Dec-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
EX-3	15-Apr-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
EX-3	01-Jul-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
EX-3	22-Sep-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
EX-3	19-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
EX-3	02-Mar-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
EX-3	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-3	17-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-3	22-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	22-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-3	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001
EX-3	23-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0006 J11	<0.001	<0.005	<0.001	0.0021	<0.001	<0.001	<0.001	<0.001	<0.001
EX-3	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	0.0009	<0.0005	<0.01	<0.0005	0.0018	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	13-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
EX-2	09-Oct-00	0.0007	0.01	0.0044	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	16-Jan-01	<0.0042	0.061	0.012	<0.0042	<0.0042	<0.0042	<0.083	<0.0042	<0.0042	<0.0042	<0.0042
EX-2	16-Apr-01	0.0016	0.047	0.016	<0.0008	<0.0008	<0.0008	<0.017	<0.0008	<0.0008	<0.0008	<0.0008
EX-2	03-Jul-01	<0.0025	0.012	0.011	<0.0025	<0.0025	<0.0025	<0.05	<0.0025	<0.0025	<0.0025	<0.0025
EX-2	12-Oct-01	<0.0008	0.0076	0.0037	<0.0008	<0.0008	<0.0008	<0.017	<0.0008	<0.0008	<0.0008	<0.0008
EX-2	16-Jan-02	<0.005	0.081	0.013	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005
EX-2	09-Apr-02	0.0006	0.0008	0.0022	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	09-Jul-02	0.0007	<0.0032	<0.0027	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	08-Oct-02	0.0017	0.0005 J	0.0021	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
EX-2	13-Jan-03	<0.0017	0.035	<0.012	<0.0013	<0.0013	<0.0013	<0.025	<0.0013	<0.0013	<0.0013	<0.0013
EX-2	14-Apr-03	<0.0036	0.0042	<0.014	0.016	<0.0036	<0.0036	<0.071	<0.0036	<0.0036	<0.0036	<0.0036
EX-2	07-Jul-03	0.0006	0.0029	0.0041	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	29-Oct-03	0.0007	0.001	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	23-Jan-04	0.001	0.0034	0.0036	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	06-May-04	<0.0005	0.0007	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	14-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	11-Oct-04	<0.0005	0.0049	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	21-Jan-05	0.0022	0.0039	0.0091	<0.0005	0.0005 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	20-Apr-05	<0.0071	0.0098	0.02 J	<0.0071	<0.0071	<0.0071	<0.14	<0.0071	<0.0071	<0.0071	<0.0071
EX-2	22-Jul-05	<0.0005	0.0004 J	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
EX-2	26-Oct-05	<0.0005	0.0008	0.0014 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
EX-2	27-Jan-06	0.0022	0.047	0.012	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-2	20-Apr-06	0.0043 J	0.015	<0.033	<0.0083	<0.0083	<0.0083	<0.17	<0.0083	<0.0083	<0.0083	<0.0083
EX-3	18-Apr-96	na	na	<0.01	<0.3	na	na	<3	<0.01	na	na	<0.3
EX-3	01-Aug-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
EX-3	18-Dec-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
EX-3	15-Apr-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
EX-3	01-Jul-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
EX-3	22-Sep-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
EX-3	19-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
EX-3	02-Mar-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
EX-3	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
EX-3	17-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
EX-3	22-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
DUP	22-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
EX-3	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
EX-3	23-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0032	<0.001	<0.001
EX-3	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0019	<0.0005	<0.0005
EX-3	13-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
EX-3	25-Jan-00	<0.0083	<0.0083	<0.0083	<0.17	1.7	0.047	<0.0083	<0.0083	<0.0083	0.32	1	<0.0083	0.75	<0.0083	<0.0083	<0.0083	1.29
EX-3	26-Apr-00	<0.0005	0.0018	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	0.0017	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0132
EX-3	26-Jul-00	<0.0005	0.0034	<0.0005	<0.01	<0.01	0.0006	0.0019	<0.0005	0.0049	0.0034	<0.01	<0.0005	0.049	0.0029	0.0019	<0.0005	0.0228
EX-3	09-Oct-00	<0.0005	0.0029	<0.0005	<0.01	<0.01	<0.0005	0.0017	<0.0005	0.0044	0.0015	<0.01	<0.0005	0.0042	0.0024	0.0017	<0.0005	0.0074
DUP	09-Oct-00	<0.0005	0.0029	<0.0005	<0.01	<0.01	<0.0005	0.0017	<0.0005	0.0042	0.0014	<0.01	<0.0005	0.0041	0.0022	0.0016	<0.0005	0.0071
EX-3	16-Jan-01	<0.0005	0.002	<0.0005	<0.01	<0.01	<0.0005	0.0015	<0.0005	0.0045	<0.0005	<0.01	<0.0005	<0.0005	0.0023	0.0015	<0.0005	0.0016
EX-3	13-Apr-01	<0.0005	0.0013	<0.0005	<0.01	<0.01	<0.0005	0.0012	<0.0005	0.0037	0.0011	<0.01	<0.0005	0.0094	0.0017	0.0011	<0.0005	0.0048
EX-3	03-Jul-01	<0.0005	0.0021	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	0.0039	0.0008	<0.01	<0.0005	0.0051	0.0025	0.0013	<0.0005	0.0094
EX-3	12-Oct-01	<0.0005	0.0018	<0.0005	<0.01	<0.01	<0.0005	0.0016	<0.0005	0.0053	<0.0005	<0.01	<0.0005	<0.0005	0.0034	0.0014	<0.0005	0.0008
EX-3	16-Jan-02	<0.0005	0.0012	<0.0005	<0.01	<0.01	0.0008	0.001	<0.0005	0.0037	0.0035	<0.01	<0.0005	0.0016	0.0023	0.0013	<0.0005	0.0023
EX-3	09-Apr-02	<0.0005	0.0012	<0.0005	<0.01	<0.01	<0.0005	0.0012	<0.0005	0.0038	<0.0005	<0.01	<0.0005	<0.0005	0.0025	0.001	<0.0005	<0.001
EX-3	30-Aug-02	<0.0005	0.0015	<0.0005	<0.01	<0.017	<0.0005	0.0012	0.24	0.0035	<0.0005	<0.01	0.0007	0.0015	0.002	0.0021	<0.0005	<0.001
EX-3	08-Oct-02	<0.0005	0.0012	<0.0005	<0.01	<0.01	<0.0005	0.0007	0.06	0.0027	<0.0005	<0.01	0.0003 J	<0.0005	0.0012	0.0015	<0.0005	<0.001
EX-3	13-Jan-03	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	0.0011	0.0098	0.0037	<0.0005	<0.01	<0.0005	0.0006	0.0017	0.0013	<0.0005	<0.001
EX-3	16-Apr-03	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	0.0005	0.0058	0.0023	<0.0005	<0.01	<0.0005	0.0008	0.0012	0.0009	<0.0005	<0.001
EX-3	07-Jul-03	<0.0005	0.0013	<0.0005	<0.01	<0.01	<0.0005	0.0009	<0.0005	0.004	<0.0005	<0.01	<0.0005	<0.0005	0.0025	0.001	<0.0005	<0.001
EX-3	29-Oct-03	<0.0005	0.0016	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	0.004	<0.0005	<0.01	<0.0005	<0.0005	0.0032	0.001	<0.0005	<0.001
EX-3	23-Jan-04	<0.0005	0.0011	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	0.0036	<0.0005	<0.01	<0.0005	<0.0005	0.0024	0.0012	<0.0005	<0.001
EX-3	06-May-04	<0.0005	0.0013	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.001	0.0032	<0.0005	<0.01	<0.0005	0.0009	0.0023	0.001	<0.0005	0.0028
EX-3	14-Jul-04	<0.0005	0.0011	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0041	<0.0005	<0.01	<0.0005	<0.0005	0.003	0.0013	<0.0005	<0.001
EX-3	11-Oct-04	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	0.001	<0.01	<0.0005	0.012	0.001	<0.0005	<0.0005	0.0033
EX-3	21-Jan-05	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0007	0.0023	<0.0005	<0.01	<0.0005	0.0021	0.0013	0.0007	<0.0005	0.0006
EX-3	20-Apr-05	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0009	0.0015	0.0007	<0.01	<0.0005	0.0033	0.0013	0.0007	<0.0005	0.003
EX-3	22-Jul-05	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.002	0.0004 J	<0.01	<0.0005	0.0014	0.0024	0.0009	<0.0005	0.0046
EX-3	26-Oct-05	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0029	<0.0005	<0.01	<0.0005	<0.0005	0.0021	0.0011	<0.0005	<0.001
EX-3	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	0.0058 J	0.0003 J	<0.0005	0.0008	0.0004 J	0.0019	<0.01	<0.0005	0.0053	<0.0005	<0.0005	<0.0005	0.0017
EX-3	20-Apr-06	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.002	0.0016	0.0004 J	<0.01	<0.0005	0.0034	0.001	0.0006	<0.0005	0.0028
EX-4	11-Sep-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-4	22-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-4	14-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0006 J11	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	14-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0006 J11	<0.001	<0.001	<0.001	<0.005	<0.001	0.0022	<0.001	<0.001	<0.001	<0.001
EX-4	23-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0006 J11	<0.001	<0.001	<0.001	<0.005	<0.001	0.0008 J11	<0.001	<0.001	<0.001	0.0019 J11
EX-4	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0073	<0.01	<0.0005	0.033	<0.0005	<0.0005	<0.0005	0.087
EX-4	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0026	<0.01	<0.0005	0.0033	<0.0005	<0.0005	<0.0005	0.036
EX-4	12-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0011	<0.01	<0.0005	0.0021	<0.0005	<0.0005	<0.0005	0.0185
EX-4	26-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0033
EX-4	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	<0.01	<0.0005	0.0026	<0.0005	<0.0005	<0.0005	0.0055
EX-4	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0055
EX-4	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
EX-3	25-Jan-00	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	0.093	0.03	0.45	<0.0083	<0.0083	<0.017	<0.017	<0.017	0.014	<0.0083
EX-3	26-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0025	<0.0005	<0.01	<0.0005	0.036	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	0.0023	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	0.0014	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	0.0014	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	13-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	0.0007	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	16-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	0.0007	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	30-Aug-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	08-Oct-02	0.0004 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	13-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	06-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	0.014	<0.0005	0.0006	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	22-Jul-05	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0011	0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	26-Oct-05	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	0.0004 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-3	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	11-Sep-98	<0.001	<0.001	<0.01 UJ3	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-4	22-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-4	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-4	23-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-4	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.01	0.0035	<0.01	<0.0005	0.032	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0091	0.0035	<0.01	<0.0005	0.041	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	12-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0032	0.0023	<0.01	<0.0005	0.0035	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	26-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0018	0.0011	<0.01	<0.0005	0.022	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	0.001	<0.01	<0.0005	0.0053	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	0.0022	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
EX-3	25-Jan-00	<0.0083	0.016	0.012 J	<0.0083	<0.0083	<0.0083	<0.17	<0.0083	<0.0083	<0.0083	<0.0083
EX-3	26-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	26-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	09-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	09-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	16-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	13-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	03-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	12-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-3	16-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	09-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	30-Aug-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	0.0015
EX-3	08-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	0.0004 J
EX-3	13-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	16-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	07-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	29-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	23-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	06-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	14-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	11-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	21-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	20-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	22-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	26-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
EX-3	27-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-3	20-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	11-Sep-98	<0.001	<0.001	<0.01 UJ3	<0.001	<0.001	<0.001	na	<0.01 UJ3	<0.002	<0.001	<0.001
EX-4	22-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
EX-4	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011	na	<0.001	<0.002	<0.001	<0.001
DUP	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.001 J11	na	<0.001	<0.002	<0.001	<0.001
EX-4	23-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.001 J11	na	<0.001	<0.002	<0.001	<0.001
EX-4	15-Jul-99	<0.0005	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	15-Oct-99	<0.0005	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-4	12-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	26-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	26-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	09-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0007	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	16-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
EX-4	16-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006
EX-4	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0023
EX-4	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-4	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-4	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0011	<0.01	<0.0005	0.0017	<0.0005	<0.0005	<0.0005	0.0101
EX-4	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0016	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0055
EX-4	12-Dec-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0025	<0.0005	0.0026	<0.01	<0.0005	0.001	<0.0005	<0.0005	<0.0005	0.0092
EX-4	13-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0016	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-4	14-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0006	<0.0005	0.0048	<0.01	<0.0005	0.0038	<0.0005	<0.0005	<0.0005	0.0366
EX-4	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.021	<0.01	<0.0005	0.0056	<0.0005	<0.0005	<0.0005	0.197
EX-4	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-4	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-4	06-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-4	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	0.0057
EX-4	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-4	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005	0.0018	<0.01	<0.0005	0.001	<0.0005	<0.0005	<0.0005	0.0092
EX-4	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0033
EX-4	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	<0.0005	0.0017	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0056
EX-4	26-Oct-05	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J
EX-4	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005	0.0007	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	0.0027
EX-4	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0025	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005	<0.0005	0.0084
EX-5	11-Sep-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.003	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-5	22-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0024	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-5	14-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	0.0052	0.0019	<0.001	0.0009 J11	0.0022	<0.005	<0.001	0.0007 J11	<0.001	<0.001	<0.001	0.0043
EX-5	23-Apr-99	<0.0063	<0.0063	<0.0063	<0.031	<0.031	0.033	<0.0063	<0.0063	0.0067	0.25	<0.031	<0.0063	0.99	<0.0063	<0.0063	<0.0063	1.36
EX-5	19-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0015	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0181
EX-5	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0047	0.0016	<0.0005	<0.0005	0.0017	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0129
EX-5	12-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.013	0.0018	<0.0005	0.0014	0.072	<0.01	<0.0005	0.085	<0.0005	<0.0005	0.0006	0.35
EX-5	26-Apr-00	<0.002	<0.002	<0.002	<0.04	<0.04	0.018	0.0022	<0.002	0.0031	0.064	<0.04	<0.002	0.037	<0.002	<0.002	<0.002	0.61
EX-5	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0022	0.0006	<0.0005	0.0007	0.009	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0426
EX-5	09-Oct-00	<0.0005	0.0016	<0.0005	0.067	5.5	0.0085	0.0022	<0.0005	0.0009	0.013	2.4	<0.0005	0.73	<0.0005	<0.0005	<0.0005	0.118
EX-5	16-Jan-01	<0.005	<0.005	<0.005	<0.1	<0.1	0.036	<0.005	<0.005	<0.005	1	<0.1	<0.005	0.29	<0.005	<0.005	<0.005	3.69
EX-5	16-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0039	0.0037	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	0.0075
EX-5	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0031	0.0042	<0.0005	0.001	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0029
DUP	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0031	0.0042	<0.0005	0.0009	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0028
EX-5	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0007	0.0027	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0012
EX-5	21-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
EX-4	16-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0013	0.0008	<0.01	<0.0005	0.0016	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0039	<0.0016	<0.01	<0.0005	<0.0011	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	12-Dec-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0019	0.0033	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	13-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	14-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0039	0.0021	<0.01	<0.0005	0.0007	<0.001	<0.001	<0.001	0.0006	<0.0005
EX-4	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.026	0.0076	<0.01	<0.0005	0.0023	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	06-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0018	0.0013	<0.01	<0.0005	0.0025	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001	0.0004 J	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0022	0.0005 J	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0022	0.0009	<0.01	<0.0005	0.0008	<0.001	<0.001	<0.001	0.0003 J	<0.0005
EX-4	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-4	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0013	0.0004 J	<0.01	<0.0005	0.0006	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-5	11-Sep-98	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-5	22-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EX-5	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0033	0.0007 J11	<0.005	<0.001	0.16	<0.001	<0.001	<0.001	<0.001	<0.001
EX-5	23-Apr-99	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	0.076	0.023	<0.031	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	0.0054 J11	<0.0063
EX-5	19-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	0.0011	<0.01	<0.0005	0.15	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-5	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.006	0.0022	<0.01	<0.0005	0.017	<0.001	<0.001	<0.001	0.0008	<0.0005
EX-5	12-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.028	0.015	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.004	<0.0005
EX-5	26-Apr-00	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.044	0.014	<0.04	<0.002	0.53	<0.004	<0.004	<0.004	<0.002	<0.002
EX-5	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0038	0.0084	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	<0.0005
EX-5	09-Oct-00	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	0.0088	0.0052	1.4	<0.0005	0.0016	<0.001	<0.001	<0.001	0.0012	<0.0005
EX-5	16-Jan-01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.13	0.044	<0.1	<0.005	<0.005	<0.01	<0.01	<0.01	0.026	<0.005
EX-5	16-Apr-01	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-5	03-Jul-01	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-5	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-5	21-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
EX-4	16-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0011	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-4	03-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0021	<0.0005	<0.0005
EX-4	16-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0017	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-4	09-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	09-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	12-Dec-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	13-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	14-Apr-03	<0.0005	0.0006	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-4	08-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-4	29-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
DUP	29-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-4	23-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	06-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	14-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	11-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
DUP	11-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-4	21-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0007	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	20-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0005 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	22-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-4	26-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
EX-4	27-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-4	20-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	11-Sep-98	<0.001	<0.001	0.0013	<0.001	<0.001	<0.001	na	<0.01	<0.002	<0.001	<0.001
EX-5	22-Oct-98	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
EX-5	14-Jan-99	<0.001	<0.001	<0.001	0.0016	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
EX-5	23-Apr-99	<0.0063	0.0046 J11	0.018	<0.0063	<0.0063	<0.0063	na	<0.0063	<0.013	<0.0063	<0.0063
EX-5	19-Jul-99	<0.0005	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-5	15-Oct-99	<0.0005	0.0006	0.0013	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
EX-5	12-Jan-00	<0.0005	0.0037	0.0038	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-5	26-Apr-00	<0.002	<0.002	0.013	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002
EX-5	26-Jul-00	<0.0005	<0.0005	<0.0027	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	09-Oct-00	<0.0005	0.0009	0.0019	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	16-Jan-01	0.011	0.024	0.03	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005
EX-5	16-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	03-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	03-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	16-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	21-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
EX-5	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0086	0.0091	<0.0005	0.0022	0.026	<0.01	<0.0005	0.0006	<0.0005	<0.0005	0.001	0.0145
EX-5	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0019	0.0043	0.016	0.0009	<0.0052	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0026
EX-5	08-Oct-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0023	0.0065	0.0008	0.0005 J	0.0008	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0011
EX-5	13-Jan-03	<0.0013	<0.0013	<0.0013	<0.025	<0.025	0.024	0.0087	<0.0013	0.0051	0.26	<0.025	<0.0013	0.018	<0.0013	<0.0013	0.0026	0.77
EX-5	14-Apr-03	<0.0013	<0.0013	<0.0013	<0.025	<0.025	0.013	0.0069	<0.0013	<0.0013	0.14	<0.025	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.636
EX-5	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0022	0.0064	<0.0005	0.0005	0.008	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.031
EX-5	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0056	<0.0005	<0.0005	0.0019	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0026
EX-5	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.012	0.011	<0.0005	0.0042	0.1	<0.01	<0.0005	0.059	<0.0005	<0.0005	0.0016	0.384
EX-5	06-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0051	0.0055	<0.0005	0.0008	0.037	<0.01	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	0.1922
EX-5	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0028	0.0066	<0.0005	0.0006	0.0048	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0081
EX-5	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-5	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.011	0.0076	<0.0005	0.0031	0.074	<0.01	<0.0005	0.0011	<0.0005	<0.0005	0.0009	0.3033
EX-5	20-Apr-05	<0.0013	<0.0013	<0.0013	<0.025	<0.025	0.0077	0.0082	<0.0013	0.0011 J	0.11	<0.025	<0.0013	0.0007 J	<0.0013	<0.0013	<0.0013	0.5231
EX-5	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0008	0.011	<0.0005	0.0003 J	0.0064	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0343 J
EX-5	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0003 J	0.0018	0.0012	0.0008	0.0008	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0009
EX-5	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0033	0.0068	<0.0005	0.001	0.0091	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.037
EX-5	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0011	0.0034	<0.0005	0.001	0.015	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0004 J	0.0921
EX-6	11-Sep-98	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	0.92	<0.5	<0.1	0.14	<0.1	<0.1	<0.1	4.4
DUP	11-Sep-98	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	0.93	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	4.5
EX-6	22-Oct-98	<0.012	<0.012	<0.012	<0.062	<0.062	0.046	<0.012	<0.012	<0.012	0.54	<0.062	<0.012	<0.012	<0.012	<0.012	<0.012	2.1
EX-6	15-Jan-99	<0.02	<0.02	<0.02	<0.1	<0.1	0.091	<0.02	<0.02	<0.02	1.6	<0.1	<0.02	0.93	<0.02	<0.02	<0.02	6.08
EX-6	23-Apr-99	<0.005	<0.005	<0.005	<0.025	<0.034 U6	0.0082	<0.005	<0.005	0.0026 J11	0.16	<0.025	<0.005	0.15	<0.005	<0.005	<0.005	1.45
DUP	23-Apr-99	<0.005	<0.005	<0.005	<0.025	<0.035 U6	0.0084	<0.005	<0.005	0.0026 J11	0.18	<0.025	<0.005	0.15	<0.005	<0.005	<0.005	1.55
EX-6	19-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	0.0194
EX-6	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.036	0.0006	<0.0005	0.0032	0.11	<0.01	<0.0005	<0.0005	0.0011	<0.0005	0.0016	0.4044
EX-6	21-Jan-00	<0.0025	<0.0025	<0.0025	<0.05	<0.05	0.033	<0.0025	<0.0025	0.0054	0.49	<0.05	<0.0025	0.0043	<0.0025	<0.0025	<0.0025	1.8
EX-6	26-Apr-00	<0.0007	<0.0007	<0.0007	<0.014	<0.014	0.013	<0.0007	<0.0007	0.004	0.066	<0.014	<0.0007	0.03	<0.0007	<0.0007	<0.0007	0.32
EX-6	26-Jul-00	<0.01	<0.01	<0.01	<0.2	<0.2	0.052	<0.01	<0.01	<0.01	1.8	<0.2	<0.01	0.058	<0.01	<0.01	<0.01	6.35
DUP	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	0.033	0.054	0.0019	<0.0005	0.0074	1.8	<0.01	<0.0005	0.073	0.0008	<0.0005	0.0016	6.62
EX-6	09-Oct-00	<0.002	<0.002	<0.002	<0.04	<0.04	0.016	<0.002	<0.002	0.0024	0.058	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	1.126
EX-6	16-Jan-01	<0.0063	<0.0063	<0.0063	<0.13	<0.13	0.045	<0.0063	<0.0063	<0.0063	1.4	<0.13	<0.0063	0.36	<0.0063	<0.0063	<0.0063	5.09
EX-6	13-Apr-01	<0.0083	<0.0083	<0.0083	<0.17	<0.17	0.036	<0.0083	<0.0083	<0.0083	1.2	<0.17	<0.0083	0.03	<0.0083	<0.0083	<0.0083	4.49
EX-6	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0094	<0.0005	<0.0005	0.0013	0.024	<0.01	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	0.074
EX-6	16-Oct-01	<0.0017	<0.0017	<0.0017	<0.033	<0.033	0.023	<0.0017	<0.0017	0.0025	0.25	<0.033	<0.0017	0.0018	<0.0017	<0.0017	<0.0017	0.937
EX-6	16-Jan-02	<0.0042	<0.0042	<0.0042	<0.083	<0.083	0.019	<0.0042	<0.0042	<0.0042	0.98	<0.083	<0.0042	0.035	<0.0042	<0.0042	<0.0042	2.76
EX-6	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0023	<0.0005	<0.0005	0.0006	0.031	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.2447
EX-6	09-Jul-02	<0.0042	<0.0042	<0.0042	<0.083	<0.083	0.014	<0.0042	0.024	<0.0042	<0.058	<0.083	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	2.074
EX-6	10-Oct-02	<0.0025	<0.0025	<0.0025	<0.05	<0.05	0.02	<0.0025	0.009	0.0013 J	0.46	<0.05	<0.0025	0.0025 J	<0.0025	<0.0025	<0.0025	1.217
EX-6	13-Jan-03	<0.0063	<0.0063	<0.0063	<0.13	<0.13	0.016	<0.0063	<0.0063	<0.0063	0.67	<0.13	<0.0063	0.022	<0.0063	0.012	<0.0063	3.23

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
EX-5	09-Apr-02	<0.0005	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	0.0082	0.0046	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.003	<0.0005
EX-5	09-Jul-02	<0.0005	<0.0005	<0.0006	<0.0005	<0.0005	<0.0005	<0.0023	<0.0013	<0.01	<0.0005	<0.017	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-5	08-Oct-02	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	0.0015	0.0008	<0.01	<0.0005	0.0068	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-5	13-Jan-03	<0.0013	<0.0013	0.0014	<0.0013	<0.0013	<0.0013	0.05	0.02	<0.025	<0.0013	<0.0013	<0.0025	<0.0025	<0.0025	0.0095	<0.0013
EX-5	14-Apr-03	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.052	0.02	<0.025	<0.0013	<0.0013	<0.0025	<0.0025	<0.0025	0.007	0.0013
EX-5	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.013	0.0059	<0.01	<0.0005	0.012	<0.001	<0.001	<0.001	0.0012	<0.0005
EX-5	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0025	0.0015	<0.01	<0.0005	0.0034	<0.001	<0.001	<0.001	0.0012	<0.0008
EX-5	23-Jan-04	<0.0005	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	0.034	0.016	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0074	<0.0006
EX-5	06-May-04	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	0.017	0.0078	<0.01	<0.0005	0.022	<0.001	<0.001	<0.001	0.0024	<0.0005
EX-5	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0086	0.0052	<0.01	<0.0005	0.0022	<0.001	<0.001	<0.001	0.0023	<0.0005
EX-5	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.01	<0.0005	0.0015	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-5	21-Jan-05	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	0.025	0.011	<0.01	<0.0005	0.0007	<0.001	<0.001	<0.001	0.0066	<0.0005
EX-5	20-Apr-05	<0.0013	<0.0013	0.0009 J	<0.0013	<0.0013	<0.0013	0.045	0.02	<0.025	<0.0013	0.0011 J	<0.0025	<0.0025	<0.0025	0.0087	0.0091
EX-5	22-Jul-05	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	0.0095	0.0048	<0.01	<0.0005	0.001	<0.001	<0.001	<0.001	0.0016	<0.0005
EX-5	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	0.0004 J	<0.01	<0.0005	0.0006	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-5	27-Jan-06	<0.0005	<0.0005	0.0005 J	<0.0005	<0.0005	<0.0005	0.0042	0.0026	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0023	<0.0005
EX-5	20-Apr-06	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	0.014	0.013	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0012	0.0077
EX-6	11-Sep-98	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.16	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
DUP	11-Sep-98	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.15	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
EX-6	22-Oct-98	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	0.1	0.039	<0.062	<0.012	<0.012	<0.012	<0.012	<0.012	0.024	<0.012
EX-6	15-Jan-99	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.17	0.057	<0.1	<0.02	0.014 J11	<0.02	<0.02	<0.02	0.035	<0.02
EX-6	23-Apr-99	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.046	0.018	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	0.0031 J11	<0.005
DUP	23-Apr-99	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.046	0.019	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	0.0035 J11	<0.005
EX-6	19-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-6	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.028	0.012	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.01	0.0015
EX-6	21-Jan-00	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.07	0.026	<0.05	<0.0025	<0.0025	<0.005	<0.005	<0.005	0.015	<0.0025
EX-6	26-Apr-00	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	0.019	0.0071	<0.014	<0.0007	0.18	<0.0014	<0.0014	<0.0014	0.001	<0.0007
EX-6	26-Jul-00	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	0.074	<0.2	<0.01	<0.01	<0.02	<0.02	<0.02	0.038	<0.013
DUP	26-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.17	0.095	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.051	<0.031
EX-6	09-Oct-00	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.043	0.029	<0.04	<0.002	<0.002	<0.004	<0.004	<0.004	<0.002	<0.002
EX-6	16-Jan-01	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	0.17	0.056	<0.13	<0.0063	<0.0063	<0.013	<0.013	<0.013	0.034	<0.0063
EX-6	13-Apr-01	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	0.16	0.053	<0.17	<0.0083	<0.0083	<0.017	<0.017	<0.017	0.028	<0.0083
EX-6	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.022	0.01	<0.01	<0.0005	0.012	<0.001	<0.001	<0.001	0.001	<0.0005
EX-6	16-Oct-01	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	0.029	0.013	<0.033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	0.011	0.0021
EX-6	16-Jan-02	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	0.098	0.043	<0.083	<0.0042	<0.0042	<0.0083	<0.0083	<0.0083	0.024	<0.0042
EX-6	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.023	0.013	<0.01	<0.0005	<0.0005	<0.001	0.0012	<0.001	0.0025	<0.0005
EX-6	09-Jul-02	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	<0.078	<0.045	<0.083	<0.0042	<0.0042	<0.0083	<0.0083	<0.0083	<0.0042	<0.0042
EX-6	10-Oct-02	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.077	0.033	<0.05	<0.0025	<0.0025	<0.005	<0.005	<0.005	0.023	0.0052
EX-6	13-Jan-03	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	0.15	0.063	<0.13	<0.0063	<0.0063	<0.013	<0.013	<0.013	0.015	<0.0063

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
EX-5	09-Apr-02	<0.0005	0.0017	0.0046	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	09-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	08-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-5	13-Jan-03	<0.0013	0.0082	0.017	<0.0013	<0.0013	<0.0013	<0.025	<0.0013	<0.0013	<0.0013	<0.0013
EX-5	14-Apr-03	<0.0013	0.0063	0.0098	<0.0013	<0.0013	0.0016	<0.025	<0.0013	<0.0013	<0.0013	<0.0013
EX-5	07-Jul-03	<0.0005	0.0008	0.0031	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	29-Oct-03	<0.0005	0.0008	<0.002	<0.0005	0.0007	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	23-Jan-04	<0.0005	0.005	0.008	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	06-May-04	<0.0005	0.0015	0.0043	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	14-Jul-04	<0.0005	0.0013	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	14-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-5	21-Jan-05	<0.0005	0.0049	0.0056	<0.0005	0.0003 J	<0.0013	<0.01	<0.0013	0.0003 J	<0.0005	<0.0005
EX-5	20-Apr-05	<0.0013	0.0084	0.012	<0.0013	<0.0013	<0.0013	<0.025	<0.0013	<0.0013	<0.0013	<0.0013
EX-5	22-Jul-05	0.0003 J	0.0014	0.0022	<0.0005	<0.0005	0.0005 J	<0.01	0.0004 J	<0.0005	<0.0005	<0.0005
EX-5	26-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
EX-5	27-Jan-06	<0.0005	0.0012	0.0012 J	<0.0005	<0.0005	0.0005	<0.01	0.0003 J	<0.0005	<0.0005	<0.0005
EX-5	20-Apr-06	<0.0005	0.0007	0.0029	<0.0005	<0.0005	0.0005	<0.01	0.0005 J	<0.0005	<0.0005	<0.0005
EX-6	11-Sep-98	<0.1	<0.1	0.012 J3	<0.1	<0.1	<0.1	na	<0.1	<0.2	<0.1	<0.1
DUP	11-Sep-98	<0.1	<0.1	0.013	<0.1	<0.1	<0.1	na	<0.1	<0.2	<0.1	<0.1
EX-6	22-Oct-98	<0.012	0.026	0.014	<0.012	<0.012	<0.012	na	<0.012	<0.025	<0.012	<0.012
EX-6	15-Jan-99	<0.02	0.04	0.021	<0.02	<0.02	<0.02	na	<0.02	<0.04	<0.02	<0.02
EX-6	23-Apr-99	<0.005	<0.005	0.014	<0.005	<0.005	<0.005	na	<0.005	<0.01	<0.005	<0.005
DUP	23-Apr-99	<0.005	0.0025 J11	0.015	<0.005	<0.005	<0.005	na	<0.005	<0.01	<0.005	<0.005
EX-6	19-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	12-Oct-99	0.001	0.0075	0.012	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	21-Jan-00	<0.0025	0.011	0.0084	<0.0025	<0.0025	<0.0025	<0.05	<0.0025	<0.0025	<0.0025	<0.0025
EX-6	26-Apr-00	<0.0007	<0.0007	0.005	<0.0007	<0.0007	<0.0007	<0.014	<0.0007	<0.0007	<0.0007	<0.0007
EX-6	26-Jul-00	<0.015	0.041	<0.026	<0.01	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01
DUP	26-Jul-00	0.015	0.057	0.049	<0.0005	0.0021	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.031
EX-6	09-Oct-00	0.0044	<0.002	0.008	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002
EX-6	16-Jan-01	0.013	0.032	0.033	<0.0063	<0.0063	<0.0063	<0.13	<0.0063	<0.0063	<0.0063	<0.0063
EX-6	13-Apr-01	<0.0083	0.027	0.025	<0.0083	<0.0083	<0.0083	<0.17	<0.0083	<0.0083	<0.0083	<0.0083
EX-6	03-Jul-01	0.0017	0.0006	0.011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	16-Oct-01	0.0072	0.0075	0.022	<0.0017	<0.0017	<0.0017	<0.033	<0.0017	<0.0017	<0.0017	<0.0017
EX-6	16-Jan-02	0.005	0.02	0.0098	<0.0042	<0.0042	<0.0042	<0.083	<0.0042	<0.0042	<0.0042	<0.0042
EX-6	09-Apr-02	0.0039	0.0017	0.0079	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	09-Jul-02	0.012	<0.0042	<0.017	<0.0042	<0.0042	<0.0042	<0.083	<0.0042	<0.0042	<0.0042	<0.0042
EX-6	10-Oct-02	0.0089	0.022	0.03	<0.0025	0.0024 J	<0.0025	<0.05	<0.0025	<0.0025	<0.0025	<0.0025
EX-6	13-Jan-03	<0.015	0.0088	<0.032	<0.0063	<0.0063	<0.0063	<0.13	<0.0063	<0.0063	<0.0063	<0.0063

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
DUP	13-Jan-03	<0.0063	<0.0063	<0.0063	<0.13	<0.13	0.018	<0.0063	<0.0063	<0.0063	0.93	<0.13	<0.0063	0.026	<0.0063	<0.0063	<0.0063	3.56
EX-6	14-Apr-03	<0.0036	<0.0036	<0.0036	<0.071	<0.071	0.01	<0.0036	0.019	<0.0036	0.15	<0.071	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	2.075
DUP	14-Apr-03	<0.0042	<0.0042	<0.0042	<0.083	<0.083	0.0095	<0.0042	<0.0042	<0.0042	0.14	<0.083	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	2.072
EX-6	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0043	<0.0005	<0.0005	0.0016	0.02	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0072
EX-6	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0017	0.015	<0.01	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	0.0037
EX-6	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	0.0022	<0.01	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	0.048
DUP	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	0.0025	<0.01	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	0.049
EX-6	06-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0045	<0.0005	<0.0005	0.001	0.067	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0866
EX-6	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0035	<0.0005	<0.0005	0.0013	0.0099	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0464
EX-6	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0028	<0.0005	<0.0005	0.0008	0.0034	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.1723
EX-6	21-Jan-05	<0.0042	<0.0042	<0.0042	<0.083	<0.083	0.0088	<0.0042	<0.0042	<0.0042	0.81	<0.083	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	2.03
EX-6	20-Apr-05	<0.002	<0.002	<0.002	<0.04	<0.04	0.0053	<0.002	<0.002	<0.002	0.36	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	1.3088
EX-6	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0013	0.0004 J	<0.0005	0.0011	0.012	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	0.0056
EX-6	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0006	0.0008	0.0009	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001
EX-6	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0029	0.0006	<0.0005	0.0008	0.32	<0.01	<0.0005	0.0007	0.0004 J	<0.0005	<0.0005	0.6718
EX-6	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0006	0.0017	<0.0005	0.0003 J	0.0094	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0393 J
EX-6	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0013	0.0004 J	<0.0005	0.0008	0.047	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0583 J
EX-6	18-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	0.05	0.0007	0.0003 J	<0.0005	0.0003 J	0.019	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	0.0044
EX-6	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0019	0.0005 J	<0.0005	0.0006	0.13	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005	<0.0005	0.35
EX-6	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0013	0.0004 J	<0.0005	0.0003 J	0.079	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	0.1803 J
EX-7	11-Sep-98	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	0.54	<0.5	<0.1	3.6	<0.1	<0.1	<0.1	2.7
EX-7	22-Oct-98	<0.005	0.0072	<0.005	<0.025	<0.025	0.0083	<0.005	<0.005	<0.005	0.091	<0.025	<0.005	0.47	<0.005	<0.005	<0.005	0.32
EX-7	14-Jan-99	<0.001	0.012	<0.001	0.011	1.6	0.028	<0.001	<0.001	0.0068	0.21	0.86	<0.001	2.2	0.0008 J11	0.0006 J11	0.0015	1.43
EX-7	23-Apr-99	<0.0063	<0.0063	<0.0063	<0.031	0.95	0.0086	<0.0063	<0.0063	0.0056 J11	0.072	<0.36 U6	<0.0063	0.7	<0.0063	<0.0063	<0.0063	0.66
EX-7	15-Jul-99	<0.0005	0.018	<0.0005	<0.01	0.029	0.0025	<0.0005	<0.0005	0.0031	0.0036	<0.01	<0.0005	0.034	0.0014	<0.0005	<0.0005	0.075
EX-7	15-Oct-99	<0.0005	0.019	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0023	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-7	19-Jan-00	<0.0005	0.0067	<0.0005	<0.01	<0.01	0.005	<0.0005	<0.0005	0.0049	<0.0005	<0.01	<0.0005	0.016	0.0019	<0.0005	0.0007	0.224
EX-7	26-Apr-00	<0.0005	0.0013	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008
EX-7	26-Jul-00	<0.0008	0.0052	<0.0008	<0.017	0.29	0.013	<0.0008	<0.0008	0.0063	0.028	0.14	<0.0008	0.22	0.0022	<0.0008	<0.0008	0.498
EX-7	09-Oct-00	<0.001	0.0046	<0.001	<0.02	<0.02	0.02	<0.001	<0.001	0.0061	0.17	<0.02	<0.001	0.26	0.0017	<0.001	<0.001	0.502
EX-7	16-Jan-01	<0.0005	0.004	<0.0005	<0.01	0.019	0.0035	<0.0005	<0.0005	0.002	0.022	<0.01	<0.0005	0.052	0.001	<0.0005	<0.0005	0.154
EX-7	13-Apr-01	<0.0007	0.001	<0.0007	<0.014	0.021	0.0065	<0.0007	<0.0007	0.0015	0.072	<0.014	<0.0007	0.17	<0.0007	0.0012	<0.0007	0.349
EX-7	03-Jul-01	<0.0005	0.015	<0.0005	<0.01	<0.01	0.0046	<0.0005	<0.0005	0.0032	0.024	<0.01	<0.0005	0.0091	0.0016	<0.0005	<0.0005	0.09
EX-7	16-Oct-01	<0.0005	0.0056	<0.0005	<0.01	<0.01	0.015	<0.0005	<0.0005	0.002	0.09	<0.01	<0.0005	0.096	0.0006	0.0011	<0.0005	0.345
DUP	16-Oct-01	<0.0005	0.0056	<0.0005	<0.01	0.011	0.015	<0.0005	<0.0005	0.0019	0.087	<0.01	<0.0005	0.097	0.0006	0.001	<0.0005	0.335
EX-7	16-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	0.086	0.0044	<0.0005	<0.0005	0.0009	0.026	0.035	<0.0005	0.11	<0.0005	<0.0005	<0.0005	0.136
EX-7	09-Apr-02	<0.0005	0.018	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	0.0013	<0.0005	<0.0005	0.0045
EX-7	09-Jul-02	0.0013	0.0056	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.026	0.0019	<0.0005	<0.01	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.0009
EX-7	15-Aug-02	<0.0005	0.011	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0068	0.0038	<0.0005	<0.01	<0.0005	<0.0005	0.0024	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
DUP	13-Jan-03	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	0.18	0.075	<0.13	<0.0063	<0.0063	<0.013	<0.013	<0.013	0.023	<0.0063
EX-6	14-Apr-03	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	0.096	0.036	<0.071	<0.0036	<0.0036	<0.0071	<0.0071	<0.0071	0.0059	<0.0036
DUP	14-Apr-03	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	0.089	0.033	<0.083	<0.0042	<0.0042	<0.0083	<0.0083	<0.0083	0.0062	<0.0042
EX-6	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0025	0.0013	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0012	<0.0005
EX-6	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0026	0.0011	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0019	<0.0009
EX-6	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.005	0.016	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.005	0.016	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-6	06-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.016	0.0067	<0.01	<0.0005	0.0056	<0.001	<0.001	<0.001	0.0062	0.0014
EX-6	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0032	0.0034	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0016	<0.0005
EX-6	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0087	0.0051	<0.01	<0.0005	0.003	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-6	21-Jan-05	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	0.21	0.078	<0.083	<0.0042	<0.0042	<0.0083	<0.0083	<0.0083	0.074	<0.0042
EX-6	20-Apr-05	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.11	0.041	<0.04	<0.002	<0.002	<0.004	<0.004	<0.004	0.037	0.012
EX-6	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0018	0.0009	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0023	<0.0005
EX-6	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	0.0004 J	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0003 J	<0.0005
EX-6	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.088	0.046	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.06	<0.0005
EX-6	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0045	0.0026	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0011	0.0025
EX-6	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0041	0.0021	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0046	<0.0005
EX-6	18-Apr-08	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.0005	0.0022	0.0016	<0.01	<0.0005	0.024	<0.001	<0.001	<0.001	0.0022	<0.0005
EX-6	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.017	0.0092	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.014	<0.0005
EX-6	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0094	0.0063	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0081	<0.0005
EX-7	11-Sep-98	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.25	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
EX-7	22-Oct-98	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.031	0.0083	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
EX-7	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.21	0.073	0.23	<0.001	0.0046	<0.001	<0.001	<0.001	0.0083	0.0008 J11
EX-7	23-Apr-99	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	0.13	0.048	0.2	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063
EX-7	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0096	0.0072	0.011	<0.0005	0.016	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-7	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-7	19-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.039	0.066	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	0.0015
EX-7	26-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	0.013	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-7	26-Jul-00	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.17	0.063	0.073	<0.0008	0.0013	<0.0017	<0.0017	<0.0017	0.0009	<0.0008
EX-7	09-Oct-00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.23	0.068	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	0.014	<0.001
EX-7	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.047	0.042	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0017	<0.0005
EX-7	13-Apr-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	0.12	0.041	<0.014	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	0.0054	<0.0007
EX-7	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.037	0.013	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0012	<0.0005
EX-7	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.18	0.056	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0077	<0.0005
DUP	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.17	0.054	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0074	<0.0005
EX-7	16-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.028	0.016	0.018	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0018	<0.0005
EX-7	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	0.0044	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-7	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0006	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-7	15-Aug-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	0.0009	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
DUP	13-Jan-03	<0.016	0.016	<0.035	<0.0063	<0.0063	<0.0063	<0.13	<0.0063	<0.0063	<0.0063	<0.0063
EX-6	14-Apr-03	0.01	0.0045	0.018	<0.0036	<0.0036	<0.0036	<0.071	<0.0036	<0.0036	<0.0036	<0.0036
DUP	14-Apr-03	0.0093	0.0049	0.017	<0.0042	<0.0042	<0.0042	<0.083	<0.0042	<0.0042	<0.0042	<0.0042
EX-6	07-Jul-03	<0.0005	0.0007	0.0028	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	29-Oct-03	0.0007	0.0012	0.0025	<0.0005	0.0009	0.0007	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	23-Jan-04	0.0016	<0.0005	0.0031	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	23-Jan-04	0.0016	<0.0005	0.003	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	06-May-04	0.0022	0.005	0.0072	<0.0005	0.0009	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	14-Jul-04	0.0011	0.0007	0.0035	<0.0005	0.0005	0.0009	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	11-Oct-04	0.0007	<0.0005	0.003	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	21-Jan-05	0.011	0.075	0.027	<0.0042	0.0027 J	<0.0042	<0.083	<0.0042	<0.0042	<0.0042	<0.0042
EX-6	20-Apr-05	0.01	0.035	0.028	<0.002	0.0027	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002
EX-6	22-Jul-05	0.0007	0.0015	0.0021	<0.0005	0.0009	0.0011	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	26-Oct-05	<0.0005	<0.0005	0.0014 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	27-Jan-06	0.0081	0.057	0.016	<0.0005	0.0024	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	20-Apr-06	<0.0005	0.0009	0.0021	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	17-Apr-07	0.0015	0.0034	0.0039	<0.0005	0.0015	0.0012	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	18-Apr-08	0.0006	0.0015	0.0024	0.0014	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	17-Apr-09	0.0017	0.012	0.0089	<0.0005	0.0029	0.0013	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-6	27-Apr-10	0.001	0.007	0.0053	<0.0005	0.0017	0.0009	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-7	11-Sep-98	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	na	<0.1	<0.2	<0.1	<0.1
EX-7	22-Oct-98	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	na	<0.005	<0.01	<0.005	<0.005
EX-7	14-Jan-99	0.0015	0.0083	0.0092	<0.001	<0.001	<0.001	na	<0.001	0.0027	<0.001	<0.001
EX-7	23-Apr-99	<0.0063	<0.0063	0.0076	<0.0063	<0.0063	<0.0063	na	<0.0063	<0.013	<0.0063	<0.0063
EX-7	15-Jul-99	<0.0005	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0072	<0.0005	<0.0005
EX-7	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0075	<0.0005	<0.0005
EX-7	19-Jan-00	0.0016	<0.0005	0.0032	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0032	<0.0005	<0.0005
EX-7	26-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-7	26-Jul-00	<0.0022	<0.0008	<0.002	<0.0008	<0.0008	<0.0008	<0.017	<0.0008	<0.0008	<0.0008	<0.0008
EX-7	09-Oct-00	0.003	0.021	0.0087	<0.001	0.0011	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001
EX-7	16-Jan-01	0.0019	0.002	0.0021	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
EX-7	13-Apr-01	0.002	0.0068	0.0038	<0.0007	<0.0007	<0.0007	<0.014	<0.0007	<0.0007	<0.0007	<0.0007
EX-7	03-Jul-01	0.0005	0.0011	0.0013	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0049	<0.0005	<0.0005
EX-7	16-Oct-01	0.0035	0.012	0.0066	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0029	<0.0005	<0.0005
DUP	16-Oct-01	0.0035	0.011	<0.0064	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.003	<0.0005	<0.0005
EX-7	16-Jan-02	<0.0005	0.0019	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-7	09-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0061	<0.0005	<0.0005
EX-7	09-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
EX-7	15-Aug-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.004	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
EX-7	07-Nov-02	<0.0005	0.0027	<0.0005	<0.01	0.016	0.0082	<0.0005	0.012	0.0021	0.029	<0.01	<0.0005	0.029	0.0011	<0.0005	0.0007	0.095
EX-7	13-Jan-03	<0.0005	0.0023	<0.0005	<0.01	0.013	0.0069	<0.0005	0.0046	0.0028	0.083	<0.01	<0.0005	0.011	0.0014	0.0011	<0.0005	0.136
EX-7	14-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0043	<0.0005	0.0008	0.0016	0.055	<0.01	<0.0005	0.032	0.0007	<0.0005	<0.0005	0.165
EX-7	07-Jul-03	<0.0005	0.0038	<0.0005	<0.01	<0.01	0.0071	<0.0005	<0.0005	0.0049	0.04	<0.01	<0.0005	0.0009	0.0024	<0.0005	<0.0005	0.0103
EX-7	29-Oct-03	<0.0005	0.0034	<0.0005	<0.01	<0.01	0.0038	<0.0005	<0.0005	0.0053	0.0068	<0.01	<0.0005	<0.0005	0.003	<0.0005	<0.0005	0.0046
EX-7	23-Jan-04	<0.0005	0.0007	<0.0005	<0.01	<0.01	0.0079	<0.0005	<0.0005	0.0038	0.034	<0.01	<0.0005	0.0069	0.002	<0.0005	<0.0005	0.0583
EX-7	06-May-04	<0.0005	0.0006	<0.0005	<0.01	<0.01	0.0025	<0.0005	<0.0005	0.0017	0.011	<0.01	<0.0005	<0.0005	0.0012	<0.0005	<0.0005	0.0272
EX-7	14-Jul-04	<0.0005	0.0009	<0.0005	<0.01	<0.01	0.004	<0.0005	<0.0005	0.0048	0.0078	<0.01	<0.0005	<0.0005	0.0028	<0.0005	<0.0005	0.0124
EX-7	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
EX-7	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0019	<0.0005	<0.0005	0.0003 J	0.013	<0.01	<0.0005	0.0041	<0.0005	<0.0005	<0.0005	0.0303
EX-7	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0007	<0.0005	<0.0005	0.0005	0.0061	<0.01	<0.0005	0.0009	0.0005 J	<0.0005	<0.0005	0.0315
EX-7	22-Jul-05	<0.0005	0.0011	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.001
EX-7	26-Oct-05	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	0.0009	<0.0005	<0.0005	<0.001
EX-7	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	0.0099 J	0.0032	<0.0005	<0.0005	0.0003 J	0.022	<0.01	<0.0005	0.0029	<0.0005	<0.0005	<0.0005	0.0202
DUP	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	0.011	0.0033	<0.0005	<0.0005	0.0003 J	0.023	<0.01	<0.0005	0.0035	<0.0005	<0.0005	<0.0005	0.0227
EX-7	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0047	<0.0005	<0.0005	0.0006	0.047	<0.01	<0.0005	0.017	<0.0005	<0.0005	<0.0005	0.085
DUP	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0028	<0.0005	<0.0005	0.0006	0.029	<0.01	<0.0005	0.011	<0.0005	<0.0005	<0.0005	0.063
EX-7	17-Apr-07	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	0.0012	0.0015	<0.01	<0.0005	<0.0005	0.0005 J	<0.0005	<0.0005	0.0024
EX-7	18-Apr-08	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	0.0005 J	0.0003 J	0.0004 J	<0.001
EX-7	17-Apr-09	<0.0005	0.0029	<0.0005	<0.01	<0.01	0.0011	<0.0005	0.0008	0.0019	0.0005	<0.01	<0.0005	<0.0005	0.0015	<0.0005	<0.0005	<0.001
EX-7	30-Apr-10	<0.0005	0.008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	0.0006	<0.01	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.001
DUP	30-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0003 J	0.0007	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
EX-8	11-Sep-98	<5	<5	<5	<25	110	<5	<5	<5	<5	<5	62	<5	49	<5	<5	<5	<5
EX-8	22-Oct-98	<1.2	<1.2	<1.2	<6.2	62	<1.2	<1.2	<1.2	<1.2	<1.2	40	<1.2	28	<1.2	<1.2	<1.2	2.2
EX-8	14-Jan-99	<0.13	<0.13	<0.13	<0.63	42	<0.13	<0.13	<0.13	<0.13	0.067 J11	19	<0.13	6.2	<0.13	<0.13	<0.13	0.56
EX-8	23-Apr-99	<1.3	<1.3	<1.3	<6.3	190	<1.3	<1.3	<1.3	<1.3	0.91 J11	85	<1.3	66	<1.3	<1.3	<1.3	4.52 J11
EX-8	19-Jul-99	<0.42	<0.42	<0.42	<8.3	130	<0.42	<0.42	<0.42	<0.42	<0.42	58	<0.42	22	<0.42	<0.42	<0.42	1.94
EX-8	15-Oct-99	<0.25	<0.25	<0.25	<5	83	<0.25	<0.25	<0.25	<0.25	<0.25	29	<0.25	6.5	<0.25	<0.25	<0.25	<0.5
EX-8	21-Jan-00	<0.25	<0.25	<0.25	<5	44	<0.25	<0.25	<0.25	<0.25	<0.25	20	<0.25	12	<0.25	<0.25	<0.25	0.42
EX-8	26-Apr-00	<0.36	<0.36	<0.36	<7.1	100	<0.36	<0.36	<0.36	<0.36	<0.36	42	<0.36	7.7	<0.36	<0.36	<0.36	<0.72
EX-8	26-Jul-00	<0.42	<0.42	<0.42	<8.3	110	<0.42	<0.42	<0.42	<0.42	<0.42	45	<0.42	14	<0.42	<0.42	<0.42	0.57
EX-8	09-Oct-00	<0.36	<0.36	<0.36	<7.1	120	<0.36	<0.36	<0.36	<0.36	<0.36	56	<0.36	16	<0.36	<0.36	<0.36	1.1
EX-8	16-Jan-01	<0.25	<0.25	<0.25	<5	62	<0.25	<0.25	<0.25	<0.25	0.64	31	<0.25	62	<0.25	<0.25	<0.25	4.7
EX-8	16-Apr-01	<0.31	<0.31	<0.31	<6.3	75	0.33	<0.31	<0.31	<0.31	1.4	33	<0.31	98	<0.31	<0.31	<0.31	7.3
DUP	16-Apr-01	<0.31	<0.31	<0.31	<6.3	76	0.36	<0.31	<0.31	<0.31	1.4	33	<0.31	95	<0.31	<0.31	<0.31	7.4
EX-8	03-Jul-01	<0.5	<0.5	<0.5	<10	130	<0.5	<0.5	<0.5	<0.5	<0.5	51	<0.5	16	<0.5	<0.5	<0.5	1.2
EX-8	16-Oct-01	<0.31	<0.31	<0.31	<6.3	130 >LR	<0.31	<0.31	<0.31	<0.31	0.81	53	<0.31	62	<0.31	<0.31	<0.31	4.08
EX-8	09-Jan-02	<0.31	<0.31	<0.31	<6.3	60	0.32	<0.31	<0.31	<0.31	1.4	21	<0.31	95	<0.31	<0.31	<0.31	8.3
EX-8	10-Apr-02	<0.31	<0.31	<0.31	<6.3	86	<0.31	<0.31	<0.31	<0.31	<0.31	8.6	<0.31	2.5	<0.31	<0.31	<0.31	<0.62

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
EX-7	07-Nov-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.052	0.0081	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0036	<0.0005
EX-7	13-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.094	0.02	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0063	<0.0005
EX-7	14-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.082	0.021	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.004	<0.0005
EX-7	07-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.036	0.0019	<0.01	<0.0005	0.0031	<0.001	<0.001	<0.001	0.0031	<0.0005
EX-7	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.011	0.0015	<0.01	<0.0005	0.0016	<0.001	<0.001	<0.001	0.001	<0.0005
EX-7	23-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.038	0.017	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0026	<0.0005
EX-7	06-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.029	0.0068	<0.01	<0.0005	0.001	<0.001	<0.001	<0.001	0.0009	<0.0005
EX-7	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.027	0.0029	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0015	<0.0005
EX-7	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-7	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.03	0.0073	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0018	<0.0005
EX-7	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.014	0.0065	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	<0.0005
EX-7	22-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-7	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-7	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.038	0.011	0.011	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0048	<0.0005
DUP	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.04	0.011	0.012	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0052	<0.0005
EX-7	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.094	0.023	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0068	<0.0005
DUP	20-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.06	0.017	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0038	0.0003 J
EX-7	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	0.0005 J	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0003 J	<0.0005
EX-7	18-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-7	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	0.0005 J	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.001	<0.0005
EX-7	30-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0004 J	<0.0005
DUP	30-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0015	<0.0005
EX-8	11-Sep-98	<5	<5	<5	<5	<5	<5	<5	<5	31	<5	<5	<5	<5	<5	<5	<5
EX-8	22-Oct-98	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	16	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
EX-8	14-Jan-99	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	6.9	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
EX-8	23-Apr-99	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	46	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
EX-8	19-Jul-99	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	29	<0.42	<0.42	<0.83	<0.83	<0.83	<0.42	<0.42
EX-8	15-Oct-99	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	15	<0.25	<0.25	<0.5	<0.5	<0.5	<0.25	<0.25
EX-8	21-Jan-00	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	9.5	<0.25	<0.25	<0.5	<0.5	<0.5	<0.25	<0.25
EX-8	26-Apr-00	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	21	<0.36	<0.36	<0.71	<0.71	<0.71	<0.36	<0.36
EX-8	26-Jul-00	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	28	<0.42	<0.42	<0.83	<0.83	<0.83	<0.42	<0.42
EX-8	09-Oct-00	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	35	<0.36	<0.36	<0.71	<0.71	<0.71	<0.36	<0.36
EX-8	16-Jan-01	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	20	<0.25	<0.25	<0.5	<0.5	<0.5	<0.25	<0.25
EX-8	16-Apr-01	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	0.34	<0.31	22	<0.31	<0.31	<0.63	<0.63	<0.63	<0.31	<0.31
DUP	16-Apr-01	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	0.37	<0.31	22	<0.31	<0.31	<0.63	<0.63	<0.63	<0.31	<0.31
EX-8	03-Jul-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	35	<0.5	<0.5	<1	<1	<1	<0.5	<0.5
EX-8	16-Oct-01	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	36	<0.31	<0.31	<0.63	<0.63	<0.63	<0.31	<0.31
EX-8	09-Jan-02	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	0.32	<0.31	21	<0.31	<0.31	<0.63	<0.63	<0.63	<0.31	<0.31
EX-8	10-Apr-02	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	14	<0.31	<0.31	<0.63	<0.63	<0.63	<0.31	<0.31

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
EX-7	07-Nov-02	<0.0005	0.0039	0.0022	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
EX-7	13-Jan-03	<0.0007	0.0079	<0.0043	<0.0005	0.0009	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
EX-7	14-Apr-03	0.0007	0.005	0.0023	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
EX-7	07-Jul-03	<0.0005	0.0034	0.0021	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0025	<0.0005	<0.0005
EX-7	29-Oct-03	<0.0005	0.0009	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0025	<0.0005	<0.0005
EX-7	23-Jan-04	0.001	0.0025	0.0045	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
EX-7	06-May-04	<0.0005	0.001	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
EX-7	14-Jul-04	<0.0005	0.0012	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0019	<0.0005	<0.0005
EX-7	14-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
EX-7	21-Jan-05	<0.0005	0.0022	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-7	20-Apr-05	0.0003 J	0.0006	0.001 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
EX-7	22-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0026	<0.0005	<0.0005
EX-7	26-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0038	<0.0005	<0.0005
EX-7	27-Jan-06	<0.0005	0.0061	0.0011 J	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	27-Jan-06	<0.0005	0.0064	<0.002	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J
EX-7	20-Apr-06	0.0007	0.01	0.0019 J	<0.0005	0.0008	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
DUP	20-Apr-06	0.0006	0.0052	0.0014 J	<0.0005	0.0005 J	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
EX-7	17-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
EX-7	18-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-7	17-Apr-09	<0.0005	0.0007	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0031	<0.0005	<0.0005
EX-7	30-Apr-10	<0.0005	0.0004 J	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0055	<0.0005	<0.0005
DUP	30-Apr-10	0.0003 J	0.0003 J	<0.002	<0.0005	0.0059	0.0024	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
EX-8	11-Sep-98	<5	<5	<5	<5	<5	<5	na	<5	<10	<5	<5
EX-8	22-Oct-98	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	na	<1.2	<2.5	<1.2	<1.2
EX-8	14-Jan-99	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	na	<0.13	<0.25	<0.13	<0.13
EX-8	23-Apr-99	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	na	<1.3	<2.5	<1.3	<1.3
EX-8	19-Jul-99	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<8.3	<0.42	<0.42	<0.42	<0.42
EX-8	15-Oct-99	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<5	<0.25	<0.25	<0.25	<0.25
EX-8	21-Jan-00	<0.25	<0.25	<0.5	<0.25	<0.25	<0.25	<5	<0.25	<0.25	<0.25	<0.25
EX-8	26-Apr-00	<0.36	<0.36	<0.71	<0.36	<0.36	<0.36	<7.1	<0.36	<0.36	<0.36	<0.36
EX-8	26-Jul-00	<0.42	<0.42	<0.83	<0.42	<0.42	<0.42	<8.3	<0.42	<0.42	<0.42	<0.42
EX-8	09-Oct-00	<0.36	<0.36	<0.71	<0.36	<0.36	<0.36	<7.1	<0.36	<0.36	<0.36	<0.36
EX-8	16-Jan-01	<0.25	<0.25	<0.5	<0.25	<0.25	<0.25	<5	<0.25	<0.25	<0.25	<0.25
EX-8	16-Apr-01	<0.31	<0.31	<0.63	<0.31	<0.31	<0.31	<6.3	<0.31	<0.31	<0.31	<0.31
DUP	16-Apr-01	<0.31	<0.31	<0.63	<0.31	<0.31	<0.31	<6.3	<0.31	<0.31	<0.31	<0.31
EX-8	03-Jul-01	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5
EX-8	16-Oct-01	<0.31	<0.31	<0.63	<0.31	<0.31	<0.31	<6.3	<0.31	<0.31	<0.31	<0.31
EX-8	09-Jan-02	<0.31	<0.31	<0.63	<0.31	<0.31	<0.31	<6.3	<0.31	<0.31	<0.31	<0.31
EX-8	10-Apr-02	<0.31	<0.31	<1.3	<0.31	<0.31	<0.31	<6.3	<0.31	<0.31	<0.31	<0.31

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
EX-8	18-Dec-02	<0.0083	<0.0083	<0.0083	<0.17	4.2	0.035	<0.0083	<0.0083	<0.0083	0.61	2.2	<0.0083	3.2	<0.0083	<0.0083	<0.0083	2.5
EX-8	13-Jan-03	<0.13	<0.13	<0.13	<2.5	98	0.29	<0.13	<0.13	<0.13	0.36	38	<0.13	45	<0.13	<0.13	<0.13	1.97
EX-8	14-Apr-03	<0.1	<0.1	<0.1	<2	78	0.22	<0.1	<0.1	<0.1	0.22	34	<0.1	35	<0.1	<0.1	<0.1	1.23
EX-8	07-Jul-03	<0.31	<0.31	<0.31	<6.3	200	<0.31	<0.31	<0.31	<0.31	0.39	41	<0.31	24	<0.31	<0.31	<0.31	1.81
EX-8	29-Oct-03	<0.42	<0.42	<0.42	<8.3	150	<0.42	<0.42	<0.42	<0.42	<0.42	68	<0.42	2.6	<0.42	<0.42	<0.42	<0.84
EX-8	23-Jan-04	<0.17	<0.17	<0.17	<3.3	98	0.26	<0.17	<0.17	<0.17	0.21	35	<0.17	32	<0.17	<0.17	<0.17	1.07
EX-8	05-May-04	<0.25	<0.25	<0.25	<5	97	0.31	<0.25	<0.25	<0.25	0.81	44	<0.25	74	<0.25	<0.25	<0.25	4.23
EX-8	14-Jul-04	<0.63	<0.63	<0.63	<13	100	<0.63	<0.63	<0.63	<0.63	1.1	42	<0.63	100	<0.63	<0.63	<0.63	7.5
EX-8	14-Oct-04	<0.63	<0.63	<0.63	<13	100	<0.63	<0.63	<0.63	<0.63	<0.63	36	<0.63	4.5	<0.63	<0.63	<0.63	<1.26
EX-8	21-Jan-05	<0.31	<0.31	<0.31	<6.3	45	0.39	<0.31	<0.31	<0.31	1.5	16	<0.31	44	<0.31	<0.31	<0.31	8
EX-8	20-Apr-05	<1	<1	<1	<20	66	<1	<1	<1	<1	3	21	<1	130	<1	<1	<1	15.2
EX-8	22-Jul-05	<0.2	<0.2	<0.2	<4	86	0.14 J	<0.2	<0.2	<0.2	0.4	33	<0.2	32	<0.2	<0.2	<0.2	2.43
EX-8	26-Oct-05	<0.17	<0.17	<0.17	<3.3	150	0.13 J	<0.17	<0.17	<0.17	0.096 J	49	<0.17	11	<0.17	<0.17	<0.17	0.56
EX-8	27-Jan-06	<0.31	<0.31	<0.31	<6.3	44	<0.31	<0.31	<0.31	<0.31	0.61	13	<0.31	31	<0.31	<0.31	<0.31	4.1
EX-8	20-Apr-06	<0.25	<0.25	<0.25	<5	44	<0.25	<0.25	<0.25	<0.25	0.33	12	<0.25	16	<0.25	<0.25	<0.25	2.56
EX-8	18-Apr-07	<0.5	<0.5	<0.5	<10	100	0.25 J	<0.5	<0.5	<0.5	0.92	30	<0.5	62	<0.5	<0.5	<0.5	6
EX-8	18-Apr-08	<0.0005	0.015	<0.0005	<0.01	0.099	0.0006	<0.0005	<0.0005	0.028	0.0063	0.032	0.0008	0.076	0.011	0.013	<0.0005	0.0141
EX-8	17-Apr-09	<0.2	<0.2	<0.2	<4	90	0.17 J	<0.2	<0.2	<0.2	1	35	<0.2	53	<0.2	<0.2	<0.2	5.5
EX-8	30-Apr-10	<0.36	<0.36	<0.36	<7.1	69	<0.36	<0.36	<0.36	<0.36	0.53	14	<0.36	33	<0.36	<0.36	<0.36	3.83
EX-9	11-Sep-98	<0.2	<0.2	<0.2	<1	1.6	<0.2	<0.2	<0.2	<0.2	0.34	1.2	<0.2	7.3	<0.2	<0.2	<0.2	1.6
EX-9	22-Oct-98	<0.025	0.18	<0.025	<0.12	0.64	<0.025	<0.025	<0.025	<0.025	0.14	0.56	<0.025	2.1	<0.025	<0.025	<0.025	0.57
EX-9	14-Jan-99	<0.025	0.24	<0.025	<0.13	0.53	<0.025	<0.025	<0.025	<0.025	0.059	0.37	<0.025	3.5	<0.025	<0.025	<0.025	0.85
EX-9	23-Apr-99	<0.033	0.18	<0.033	<0.17	<1.3 U6	<0.033	<0.033	<0.033	<0.033	0.043	<0.4 U6	<0.033	5.4	<0.033	<0.033	<0.033	3.24
EX-9	15-Jul-99	<0.01	0.15	<0.01	<0.2	0.53	<0.01	<0.01	<0.01	<0.01	0.36	0.35	<0.01	2.6	<0.01	0.014	<0.01	1.4
EX-9	14-Oct-99	<0.0005	0.17	<0.0005	<0.01	0.11	0.002	<0.0005	<0.0005	0.0088	0.002	0.027	0.0007	0.032	0.0045	0.011	<0.0005	0.182
EX-9	21-Jan-00	<0.0005	0.12	<0.0005	<0.01	0.078	0.001	<0.0005	<0.0005	0.0084	<0.0005	0.036	0.0012	0.12 J	0.006	0.014	<0.0005	0.352 JJ
DUP	21-Jan-00	<0.0005	0.11	<0.0005	<0.01	0.064	<0.0005	<0.0005	<0.0005	0.0062	<0.0005	0.025	0.001	0.018 J	0.0051	0.012	<0.0005	0.233 JJ
EX-9	26-Apr-00	<0.0063	0.031	<0.0063	<0.13	1.3	0.0066	<0.0063	<0.0063	<0.0063	0.2	<0.13	<0.0063	1.4	<0.0063	<0.0063	<0.0063	0.59
EX-9	26-Jul-00	<0.017	0.12	<0.017	<0.33	2.3	<0.017	<0.017	<0.017	<0.017	0.028	0.58	<0.017	3.9	<0.017	<0.017	<0.017	1.67
EX-9	09-Oct-00	<0.0013	0.11	<0.0013	<0.025	0.054	<0.0013	<0.0013	<0.0013	0.015	0.05	<0.025	<0.0013	0.34	0.005	0.0065	<0.0013	0.229
EX-9	16-Jan-01	<0.013	0.11	<0.013	<0.25	1	<0.013	<0.013	<0.013	<0.013	0.061	0.48	<0.013	2.8	<0.013	0.017	<0.013	1.47
EX-9	13-Apr-01	<0.013	<0.013	<0.013	<0.25	3.7	<0.013	<0.013	<0.013	<0.013	0.031	1.9	<0.013	0.96	<0.013	<0.013	<0.013	0.324
EX-9	03-Jul-01	<0.025	0.06	<0.025	<0.5	6.9	<0.025	<0.025	<0.025	<0.025	0.16	2.5	<0.025	3.2	<0.025	<0.025	<0.025	1.67
EX-9	12-Oct-01	<0.002	0.024	<0.002	<0.04	0.62	<0.002	<0.002	<0.002	0.01	0.21	0.25	<0.002	0.1	0.0051	0.004	<0.002	0.377
EX-9	21-Jan-02	<0.0031	0.0053	<0.0031	<0.063	0.85	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.063	<0.0031	0.0071	<0.0031	<0.0031	<0.0031	<0.0062
EX-9	09-Apr-02	<0.0005	0.008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0027
EX-9	30-Aug-02	<0.0031	0.057	<0.0031	<0.063	1.1	<0.0031	<0.0031	0.0046	0.01	0.39	0.47	<0.0031	1.7	0.0056	0.02	<0.0031	1.32
EX-9	12-Dec-02	<0.0005	0.1	<0.0005	<0.01	1.1	0.0022	<0.0005	<0.0005	0.01	0.036	0.24	0.0014	1.1	0.0051	0.012	<0.0005	1.78
EX-9	13-Jan-03	<0.017	0.054	<0.017	<0.33	3.7	<0.017	<0.017	<0.017	<0.017	0.97	1.4	<0.017	4.8	<0.017	<0.017	0.019	3.29

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
EX-8	18-Dec-02	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	0.11	0.04	2.2	<0.0083	<0.0083	<0.017	<0.017	<0.017	0.017	<0.0083
EX-8	13-Jan-03	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	0.15	<0.13	37	<0.13	<0.13	<0.25	<0.25	<0.25	<0.13	<0.13
EX-8	14-Apr-03	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	26	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.1
EX-8	07-Jul-03	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	9.9	<0.31	<0.31	<0.63	<0.63	<0.63	<0.31	<0.31
EX-8	29-Oct-03	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	38	<0.42	<0.42	<0.83	<0.83	<0.83	<0.42	<0.42
EX-8	23-Jan-04	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	31	<0.17	<0.17	<0.33	<0.33	<0.33	<0.17	<0.17
EX-8	05-May-04	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	36	<0.25	<0.25	<0.5	<0.5	<0.5	<0.25	<0.25
EX-8	14-Jul-04	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	34	<0.63	<0.63	<1.3	<1.3	<1.3	<0.63	<0.63
EX-8	14-Oct-04	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	28	<0.63	<0.63	<1.3	<1.3	<1.3	<0.63	<0.63
EX-8	21-Jan-05	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	0.42	<0.31	18	<0.31	<0.31	<0.63	<0.63	<0.63	<0.31	<0.31
EX-8	20-Apr-05	<1	<1	<1	<1	<1	<1	1	<1	22	<1	0.59 J	<2	<2	<2	<1	<1
EX-8	22-Jul-05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	29	<0.2	<0.2	<0.4	<0.4	<0.4	<0.2	<0.2
EX-8	26-Oct-05	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	51	<0.17	<0.17	<0.33	<0.33	<0.33	<0.17	<0.17
EX-8	27-Jan-06	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	0.35	<0.31	12	<0.31	<0.31	<0.63	<0.63	<0.63	<0.31	<0.31
EX-8	20-Apr-06	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.22 J	<0.25	10	<0.25	<0.25	<0.5	<0.5	<0.5	<0.25	<0.25
EX-8	18-Apr-07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.27 J	<0.5	35	<0.5	<0.5	<1	<1	<1	<0.5	<0.5
EX-8	18-Apr-08	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	0.0039	0.0011	0.034	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0007	<0.0005
EX-8	17-Apr-09	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.32	<0.2	35	<0.2	<0.2	<0.4	<0.4	<0.4	<0.2	<0.2
EX-8	30-Apr-10	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	0.23 J	<0.36	19	<0.36	<0.36	<0.71	<0.71	<0.71	<0.36	<0.36
EX-9	11-Sep-98	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
EX-9	22-Oct-98	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.025	<0.025	0.13	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
EX-9	14-Jan-99	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.025	<0.025	<0.13	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
EX-9	23-Apr-99	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	0.18	0.051	0.19	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033
EX-9	15-Jul-99	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.088	0.024	<0.2	<0.01	<0.01	<0.02	<0.02	<0.02	<0.01	<0.01
EX-9	14-Oct-99	<0.0005	0.0019	<0.0005	<0.0005	<0.0005	<0.0005	0.025	0.012	0.026	<0.0005	0.0057	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-9	21-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.026	0.016	0.018	<0.0005	0.0025	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	21-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.018	0.013	0.017	<0.0005	0.0021	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-9	26-Apr-00	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	0.062	0.018	0.15	<0.0063	0.019	<0.013	<0.013	<0.013	<0.0063	<0.0063
EX-9	26-Jul-00	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	0.083	0.03	<0.33	<0.017	<0.017	<0.033	<0.033	<0.033	<0.017	<0.017
EX-9	09-Oct-00	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.027	0.0095	<0.025	<0.0013	0.0027	<0.0025	<0.0025	<0.0025	<0.0013	<0.0013
EX-9	16-Jan-01	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	0.093	0.031	<0.25	<0.013	<0.013	<0.025	<0.025	<0.025	<0.013	<0.013
EX-9	13-Apr-01	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	0.021	<0.013	0.69	<0.013	<0.013	<0.025	<0.025	<0.025	<0.013	<0.013
EX-9	03-Jul-01	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.11	0.036	0.86	<0.025	<0.025	<0.05	<0.05	<0.05	<0.025	<0.025
EX-9	12-Oct-01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.045	0.018	0.07	<0.002	<0.002	<0.004	<0.004	<0.004	0.0049	<0.002
EX-9	21-Jan-02	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.063	<0.0031	<0.0031	<0.0063	<0.0063	<0.0063	<0.0031	<0.0031
EX-9	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0019	0.0006	<0.01	<0.0005	0.002	<0.001	0.0011	<0.001	<0.0005	<0.0005
EX-9	30-Aug-02	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	0.19	0.056	0.17	<0.0031	<0.0031	<0.0063	<0.0063	<0.0063	0.0084	<0.0031
EX-9	12-Dec-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.18	0.068	0.18	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0009	<0.0005
EX-9	13-Jan-03	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	0.3	0.099	0.56	<0.017	<0.017	<0.033	<0.033	<0.033	0.026	<0.017

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
EX-8	18-Dec-02	<0.0083	0.016	<0.033	<0.0083	<0.0083	<0.0083	<0.17	<0.0083	<0.0083	<0.0083	<0.0083
EX-8	13-Jan-03	<0.13	<0.13	<0.5	<0.13	<0.13	<0.13	<2.5	<0.13	<0.13	<0.13	<0.13
EX-8	14-Apr-03	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.1	<0.1
EX-8	07-Jul-03	<0.31	<0.31	<1.3	<0.31	<0.31	<0.31	<6.3	<0.31	<0.31	<0.31	<0.31
EX-8	29-Oct-03	<0.42	<0.42	<1.7	<0.42	<0.42	<0.42	<8.3	<0.42	<0.42	<0.42	<0.42
EX-8	23-Jan-04	<0.17	<0.17	<0.67	<0.17	<0.17	<0.17	<3.3	<0.17	<0.17	<0.17	<0.17
EX-8	05-May-04	<0.25	<0.25	<1	<0.25	<0.25	<0.25	<5	<0.25	<0.25	<0.25	<0.25
EX-8	14-Jul-04	<0.63	<0.63	<2.5	<0.63	<0.63	<0.63	<13	<0.63	<0.63	<0.63	<0.63
EX-8	14-Oct-04	<0.63	<0.63	<2.5	<0.63	<0.63	<0.63	<13	<0.63	<0.63	<0.63	<0.63
EX-8	21-Jan-05	<0.31	<0.31	<1.3	<0.31	<0.31	<0.31	<6.3	<0.31	<0.31	<0.31	<0.31
EX-8	20-Apr-05	<1	<1	<4	<1	<1	<1	<20	<1	<1	<1	<1
EX-8	22-Jul-05	<0.2	<0.2	<0.8	<0.2	<0.2	<0.2	<4	<0.2	<0.2	<0.2	<0.2
EX-8	26-Oct-05	<0.17	<0.17	<0.67	<0.17	<0.17	<0.17	<3.3	<0.17	<0.17	<0.17	<0.17
EX-8	27-Jan-06	<0.31	<0.31	<1.3	<0.31	<0.31	<0.31	<6.3	<0.31	<0.31	<0.31	<0.31
EX-8	20-Apr-06	<0.25	<0.25	<1	<0.25	<0.25	<0.25	<5	<0.25	<0.25	<0.25	<0.25
EX-8	18-Apr-07	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5
EX-8	18-Apr-08	<0.0005	0.0007	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0031	<0.0005	<0.0005
EX-8	17-Apr-09	<0.2	<0.2	<0.8	<0.2	<0.2	<0.2	<4	<0.2	<0.2	<0.2	<0.2
EX-8	30-Apr-10	<0.36	<0.36	<1.4	<0.36	<0.36	<0.36	<7.1	<0.36	<0.36	<0.36	<0.36
EX-9	11-Sep-98	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	na	<0.2	<0.4	<0.2	<0.2
EX-9	22-Oct-98	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	na	<0.025	<0.05	<0.025	<0.025
EX-9	14-Jan-99	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	na	<0.025	<0.05	<0.025	<0.025
EX-9	23-Apr-99	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	na	<0.033	<0.067	<0.033	<0.033
EX-9	15-Jul-99	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01
EX-9	14-Oct-99	<0.0005	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0053	<0.0005	<0.0005
EX-9	21-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.004	<0.0005	<0.0005
DUP	21-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0037	<0.0005	<0.0005
EX-9	26-Apr-00	<0.0063	<0.0063	<0.013	<0.0063	<0.0063	<0.0063	<0.13	<0.0063	<0.0063	<0.0063	<0.0063
EX-9	26-Jul-00	<0.017	<0.017	<0.033	<0.017	<0.017	<0.017	<0.33	<0.017	<0.017	<0.017	<0.017
EX-9	09-Oct-00	<0.0013	0.0013	<0.0025	<0.0013	<0.0013	<0.0013	<0.025	<0.0013	0.0043	<0.0013	<0.0013
EX-9	16-Jan-01	<0.013	<0.013	<0.025	<0.013	<0.013	<0.013	<0.25	<0.013	<0.013	<0.013	<0.013
EX-9	13-Apr-01	<0.013	<0.013	<0.025	<0.013	<0.013	<0.013	<0.25	<0.013	<0.013	<0.013	<0.013
EX-9	03-Jul-01	<0.025	<0.025	<0.05	<0.025	<0.025	<0.025	<0.5	<0.025	<0.025	<0.025	<0.025
EX-9	12-Oct-01	<0.002	0.0053	<0.004	<0.002	<0.002	<0.002	<0.04	<0.002	0.0033	<0.002	<0.002
EX-9	21-Jan-02	<0.0031	<0.0031	<0.0063	<0.0031	<0.0031	<0.0031	<0.063	<0.0031	<0.0031	<0.0031	<0.0031
EX-9	09-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0031	<0.0005	<0.0005
EX-9	30-Aug-02	<0.0031	0.012	<0.013	<0.0031	<0.0031	<0.0031	<0.063	<0.0031	0.0034	<0.0031	<0.0031
EX-9	12-Dec-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0024	<0.0005	<0.0005
EX-9	13-Jan-03	<0.017	0.019	<0.067	<0.017	<0.017	<0.017	<0.33	<0.017	<0.017	<0.017	<0.017

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
EX-9	14-Apr-03	<0.01	0.03	<0.01	<0.2	2	<0.01	<0.01	<0.01	<0.01	0.61	0.71	<0.01	2.8	<0.01	<0.01	<0.01	1.88
EX-9	07-Jul-03	<0.036	<0.036	<0.036	<0.71	8.8	<0.036	<0.036	<0.036	<0.036	0.38	2.7	<0.036	0.57	<0.036	<0.036	<0.036	1.22
EX-9	29-Oct-03	<0.01	0.034	<0.01	<0.2	2.2	<0.01	<0.01	<0.01	0.011	0.26	0.8	<0.01	0.55	<0.01	<0.01	<0.01	0.781
EX-9	23-Jan-04	<0.02	0.023	<0.02	<0.4	5.4	<0.02	<0.02	<0.02	<0.02	1	2.6	<0.02	5.7	<0.02	<0.02	<0.02	4.1
EX-9	06-May-04	<0.0083	0.028	<0.0083	<0.17	2.7	<0.0083	<0.0083	<0.0083	0.016	0.42	1.1	<0.0083	1.1	<0.0083	0.023	<0.0083	1.61
EX-9	14-Jul-04	<0.017	0.025	<0.017	<0.33	2.4	<0.017	<0.017	<0.017	<0.017	0.33	0.82	<0.017	1.1	<0.017	<0.017	<0.017	1.21
EX-9	14-Oct-04	<0.002	0.021	<0.002	<0.04	0.34	<0.002	<0.002	<0.002	0.012	0.16	0.12	<0.002	0.74	0.0058	0.0094	<0.002	1.05
EX-9	21-Jan-05	<0.05	<0.05	<0.05	<1	14	<0.05	<0.05	<0.05	<0.05	1.3	7.4	<0.05	6.7	<0.05	<0.05	<0.05	5
EX-9	20-Apr-05	<0.031	0.017 J	<0.031	<0.63	17	<0.031	<0.031	<0.031	<0.031	0.55	4.2	<0.031	3	<0.031	<0.031	<0.031	2.03
EX-9	22-Jul-05	<0.0083	0.011	<0.0083	<0.17	8.7	<0.0083	<0.0083	<0.0083	0.0091	0.025	1.9	<0.0083	1.4	<0.0083	0.0048 J	<0.0083	0.81
EX-9	26-Oct-05	<0.0005	0.03	<0.0005	<0.01	<0.01	0.0007	<0.0005	<0.0005	0.024	0.0011	<0.01	0.0005 J	0.001	0.012	0.013	<0.0005	0.0073
EX-9	27-Jan-06	<0.017	0.013 J	<0.017	<0.33	2.8	<0.017	<0.017	<0.017	0.017 J	0.11	0.94	<0.017	0.65	<0.017	<0.017	<0.017	0.68
EX-9	20-Apr-06	<0.025	0.015 J	<0.025	<0.5	10	<0.025	<0.025	<0.025	0.016 J	0.35	3	<0.025	2.3	<0.025	<0.025	<0.025	2.01
EX-9	17-Apr-07	<0.0005	0.0065	<0.0005	<0.01	<0.01	0.0007	<0.0005	<0.0005	0.025	0.11	<0.01	0.0005 J	0.011	0.0088	0.0051	<0.0005	0.138
EX-9	18-Apr-08	<0.0005	0.015	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.03	0.0021	<0.01	0.0006	<0.0005	0.011	0.012	<0.0005	<0.001
EX-9	17-Apr-09	<0.0005	0.012	<0.0005	<0.01	0.013	<0.0005	<0.0005	<0.0005	0.026	0.0059	<0.01	0.0007	0.0003 J	0.009	0.01	<0.0005	0.0007
EX-9	30-Apr-10	<0.0005	0.008	<0.0005	<0.01	0.072	0.0003 J	<0.0005	<0.0005	0.017	0.036	0.02	0.0006	0.015	0.0062	0.0083	<0.0005	0.0173
LF-1	01-Jun-89	<0	<0.2	na	15	30	<0.2	<0.2	na	na	0.9	20	<0.2	6	na	<0.2	na	3.6
LF-1	07-Dec-89	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	0.002	<0.001	na	<0.001	na	0.04
LF-1	20-Jul-90	<0	<0.001	na	<0.001	0.45	0.002	<0.001	na	0.001	<0.001	0.2	0.005	0.018	na	0.004	na	0.16
LF-1	21-Jun-91	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	0.019	<0.02	0.002	<0.005	na	<0.005	na	0.01
LF-1	09-Jul-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	0.008	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-1	09-Jun-93	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-10	05-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	07-Dec-89	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-10	19-Jul-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
DUP	19-Jul-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-10	19-Dec-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
DUP	19-Dec-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-10	21-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	21-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	21-Jun-91	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-10	18-Dec-91	<0.005	<0.005	na	<0.010	<0.020	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
DUP	18-Dec-91	<0.005	<0.005	na	<0.010	<0.020	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
LF-10	09-Jul-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-10	31-Dec-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
DUP	31-Dec-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-10	09-Jun-93	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-10	06-Jan-94	<0	<0.003	<0.003	<0.03	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgLl)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
EX-9	14-Apr-03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.16	0.05	0.22	<0.01	<0.01	<0.02	<0.02	<0.02	0.017	<0.01
EX-9	07-Jul-03	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	0.089	<0.036	<0.71	<0.036	<0.036	<0.071	<0.071	<0.071	<0.036	<0.036
EX-9	29-Oct-03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.023	0.014	<0.2	<0.01	<0.01	<0.02	<0.02	<0.02	<0.01	<0.01
EX-9	23-Jan-04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.42	0.12	1.6	<0.02	<0.02	<0.04	<0.04	<0.04	0.023	<0.02
EX-9	06-May-04	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	0.19	0.062	0.46	<0.0083	<0.0083	<0.017	<0.017	<0.017	0.0096	<0.0083
EX-9	14-Jul-04	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	0.15	0.046	<0.33	<0.017	<0.017	<0.033	<0.033	<0.033	<0.017	<0.017
EX-9	14-Oct-04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.16	0.051	0.051	<0.002	<0.002	<0.004	<0.004	<0.004	0.0025	<0.002
EX-9	21-Jan-05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.56	0.16	3.6	<0.05	<0.05	<0.1	<0.1	<0.1	0.032 J	<0.05
EX-9	20-Apr-05	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	0.23	0.065	2.9	<0.031	<0.031	<0.063	<0.063	<0.063	<0.031	<0.031
EX-9	22-Jul-05	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	0.081	0.028	1	<0.0083	<0.0083	<0.017	<0.017	<0.017	<0.0083	<0.0083
EX-9	26-Oct-05	0.0003 J	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	0.0053	0.001	<0.01	<0.0005	0.0004 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
EX-9	27-Jan-06	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	0.11	0.036	0.48	<0.017	<0.017	<0.033	<0.033	<0.033	<0.017	<0.017
EX-9	20-Apr-06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.25	0.076	1.9	<0.025	<0.025	<0.05	<0.05	<0.05	<0.025	<0.025
EX-9	17-Apr-07	<0.0005	0.0005 J	<0.0005	<0.0005	<0.0005	<0.0005	0.049	0.017	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.004	<0.0005
EX-9	18-Apr-08	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	0.0013	0.0003 J	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0004 J	<0.0005
EX-9	17-Apr-09	<0.0005	0.0005 J	<0.0005	<0.0005	<0.0005	<0.0005	0.0042	0.002	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0005	<0.0005
EX-9	30-Apr-10	<0.0005	0.0004 J	<0.0005	<0.0005	<0.0005	<0.0005	0.033	0.011	0.0075 J	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0017	<0.0005
LF-1	01-Jun-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-1	07-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-1	20-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-1	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-1	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-1	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	05-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	07-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	19-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	19-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	19-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	19-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	21-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	21-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	18-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	18-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	31-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	31-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-10	06-Jan-94	<0.003	<0.003	na	<0.003	<0.003	na	na	na	<0.03	na	<0.005	<0.005	<0.005	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
EX-9	14-Apr-03	<0.01	0.019	<0.04	<0.01	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01
EX-9	07-Jul-03	<0.036	<0.036	<0.14	<0.036	<0.036	<0.036	<0.71	<0.036	<0.036	<0.036	<0.036
EX-9	29-Oct-03	<0.01	0.015	<0.04	<0.01	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01
EX-9	23-Jan-04	<0.02	0.033	<0.08	<0.02	<0.02	<0.02	<0.4	<0.02	<0.02	<0.02	<0.02
EX-9	06-May-04	<0.0083	0.014	<0.033	<0.0083	<0.0083	<0.0083	<0.17	<0.0083	<0.0083	<0.0083	<0.0083
EX-9	14-Jul-04	<0.017	<0.017	<0.067	<0.017	<0.017	<0.017	<0.33	<0.017	<0.017	<0.017	<0.017
EX-9	14-Oct-04	<0.002	0.0024	<0.008	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002
EX-9	21-Jan-05	<0.05	0.042 J	<0.2	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.05	<0.05
EX-9	20-Apr-05	<0.031	0.018 J	<0.13	<0.031	<0.031	<0.031	<0.63	<0.031	<0.031	<0.031	<0.031
EX-9	22-Jul-05	<0.0083	<0.0083	<0.033	<0.0083	<0.0083	<0.0083	<0.17	<0.0083	<0.0083	<0.0083	<0.0083
EX-9	26-Oct-05	<0.0005	<0.0005	0.0014 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0036	<0.0005	<0.0005
EX-9	27-Jan-06	<0.017	<0.017	<0.067	<0.017	<0.017	<0.017	<0.33	<0.017	<0.017	<0.017	<0.017
EX-9	20-Apr-06	<0.071	<0.025	<0.1	<0.025	<0.025	<0.025	<0.5	<0.025	<0.025	<0.025	<0.025
EX-9	17-Apr-07	0.0005 J	0.0044	0.0016 J	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	0.0033	<0.0005	0.0003 J
EX-9	18-Apr-08	<0.0005	0.0004 J	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.003	<0.0005	<0.0005
EX-9	17-Apr-09	<0.0005	0.0007	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0025	<0.0005	<0.0005
EX-9	30-Apr-10	<0.0005	0.0026	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-1	01-Jun-89	na	na	0.018	na	na	na	na	na	na	na	na
LF-1	07-Dec-89	na	na	<0.004	na	na	na	na	na	na	na	na
LF-1	20-Jul-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-1	21-Jun-91	na	na	<0.011	na	na	na	na	na	na	na	na
LF-1	09-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-1	09-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-10	05-Dec-89	na	na	0.14	na	na	na	na	na	na	na	na
LF-10	07-Dec-89	na	na	na	na	na	na	na	na	na	na	na
LF-10	19-Jul-90	na	na	<0.002	na	na	na	na	na	na	na	na
DUP	19-Jul-90	na	na	na	na	na	na	na	na	na	na	na
LF-10	19-Dec-90	na	na	na	na	na	na	na	na	na	na	na
DUP	19-Dec-90	na	na	na	na	na	na	na	na	na	na	na
LF-10	21-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
DUP	21-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-10	21-Jun-91	na	na	<0.01	na	na	na	na	na	na	na	na
LF-10	18-Dec-91	na	na	na	na	na	na	na	na	na	na	na
DUP	18-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-10	09-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-10	31-Dec-92	na	na	na	na	na	na	na	na	na	na	na
DUP	31-Dec-92	na	na	na	na	na	na	na	na	na	na	na
LF-10	09-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-10	06-Jan-94	na	na	na	<0.003	na	na	<0.03	na	na	na	<0.003

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
DUP	06-Jan-94	<0	<0.003	<0.003	<0.03	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005
LF-10	27-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	0.011	<0.001	<0.001	0.0022	0.0017	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	0.0062
LF-10	15-Jan-99	<0.001	<0.001	<0.001	<0.005	0.035	<0.001	<0.001	<0.001	0.0009 J11	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	0.0006 J11	<0.001
LF-10	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	0.016	<0.0005	<0.0005	<0.0005	0.0005	0.0017	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0032
LF-10	23-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-10	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-10	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-10	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-10	14-Oct-04	<0.0005	0.003	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006
LF-10	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-10	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-10	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-10	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-10	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	05-Dec-89	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	0.002	na	<0.001	na	<0.001
DUP	05-Dec-89	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.023	na	<0.001	na	<0.001
LF-11	19-Jul-90	<0	<0.001	na	<0.001	0.015	<0.001	<0.001	na	na	<0.001	<0.02	0.001	<0.001	na	<0.001	na	<0.001
LF-11	08-Aug-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-11	21-Dec-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-11	21-Jun-91	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
DUP	21-Jun-91	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-11	17-Dec-91	<0.005	<0.005	na	<0.010	<0.020	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
LF-11	09-Jul-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-11	31-Dec-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-11	09-Jun-93	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-11	05-Jan-94	<0	<0.003	<0.003	<0.03	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005
LF-11	16-Apr-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-11	31-Jul-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-11	20-Nov-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-11	18-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
DUP	18-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-11	11-Jun-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-11	19-Aug-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
DUP	19-Aug-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-11	17-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	0.024
LF-11	02-Mar-98	<0	<0.001	<0.001	<0.02	<0.02	0.0085	<0.001	<0.001	<0.001	0.14	<0.02	<0.001	0.31 J1	<0.001	0.0014	<0.002	0.513 J1
LF-11	10-Apr-98	<0	<0.01	<0.01	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	0.1	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	0.47
DUP	10-Apr-98	<0	<0.005	<0.005	<0.025	<0.025	0.0078	<0.005	<0.005	<0.005	0.1	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	0.47

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
DUP	06-Jan-94	<0.003	<0.003	na	<0.003	<0.003	na	na	na	<0.03	na	<0.005	<0.005	<0.005	na	na	na
LF-10	27-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-10	15-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-10	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0006	<0.0005
LF-10	23-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-10	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-10	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-10	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-10	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	0.0005	<0.001	<0.001	<0.001	0.0007	<0.0005
LF-10	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-10	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-10	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-10	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-10	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	05-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	05-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-11	19-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-11	08-Aug-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-11	21-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-11	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-11	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-11	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-11	31-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-11	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-11	05-Jan-94	<0.003	<0.003	na	<0.003	<0.003	na	na	na	<0.03	na	<0.005	<0.005	<0.005	na	na	na
LF-11	16-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-11	31-Jul-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-11	20-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-11	18-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
DUP	18-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-11	11-Jun-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	0.016	<0.01	<0.01	na	na	na
LF-11	19-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
DUP	19-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-11	17-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-11	02-Mar-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0025	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	0.0028	<0.001
LF-11	10-Apr-98	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
DUP	10-Apr-98	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
DUP	06-Jan-94	na	na	na	<0.003	na	na	<0.03	na	na	na	<0.003
LF-10	27-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-10	15-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0007 J11	na	<0.001	<0.002	<0.001	<0.001
LF-10	18-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0011	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-10	23-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.001	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-10	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0009	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-10	16-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0009 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-10	22-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0013	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-10	14-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	0.001	0.0008	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-10	20-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0013	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-10	24-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0012	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-10	17-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0015	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	17-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0015	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-10	15-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0013	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-10	26-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0008	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	05-Dec-89	na	na	<0.002	na	na	na	na	na	na	na	na
DUP	05-Dec-89	na	na	na	na	na	na	na	na	na	na	na
LF-11	19-Jul-90	na	na	na	na	na	na	na	na	na	na	na
LF-11	08-Aug-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-11	21-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-11	21-Jun-91	na	na	<0.01	na	na	na	na	na	na	na	na
DUP	21-Jun-91	na	na	<0.01	na	na	na	na	na	na	na	na
LF-11	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-11	09-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-11	31-Dec-92	na	na	na	na	na	na	na	na	na	na	na
LF-11	09-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-11	05-Jan-94	na	na	na	<0.003	na	na	<0.03	na	na	na	<0.003
LF-11	16-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-11	31-Jul-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-11	20-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-11	18-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
DUP	18-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-11	11-Jun-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-11	19-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
DUP	19-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-11	17-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-11	02-Mar-98	<0.001	0.0012	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-11	10-Apr-98	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	na	<0.01	<0.02	<0.01	<0.01
DUP	10-Apr-98	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	na	<0.005	<0.01	<0.005	<0.005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-11	16-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-11	23-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-11	14-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-11	22-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	22-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-11	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	20-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	01-May-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	22-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	03-Apr-02	na	na	na	na	na	<0.001	na	na	na	<0.001	na	na	<0.001	na	na	na	<0.001
LF-11	10-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	10-Oct-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	10-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	28-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	04-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	21-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.01	0.0077 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	07-Jul-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
LF-11	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-11	16-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-11	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-11	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-11	22-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	22-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-11	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	20-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	01-May-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	22-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-11	10-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	10-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	10-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	28-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	04-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	21-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	07-Jul-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-11	16-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-11	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-11	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0005 J11	na	<0.001	<0.002	<0.001	<0.001
LF-11	22-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
DUP	22-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-11	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	20-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	01-May-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	24-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	22-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	10-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	10-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	06-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	16-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na
LF-11	10-Apr-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	09-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	10-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	20-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	16-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	10-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	28-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	04-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	15-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	11-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	20-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	20-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	20-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	21-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	26-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	24-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	07-Jul-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	16-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-11	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-11	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-12	06-Dec-89	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	0.005	na	<0.001	na	<0.001
LF-12	18-Jul-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	0.001	<0.001	na	0.002	na	<0.001
LF-12	19-Dec-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	0.002	<0.001	na	0.003	na	<0.001
LF-12	19-Jun-91	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	0.002	na	<0.005
LF-12	16-Dec-91	<0.005	<0.005	na	<0.010	<0.020	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
LF-12	08-Jul-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-12	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-12	30-Dec-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-12	08-Jun-93	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-12	06-Jan-94	<0	<0.003	<0.003	<0.03	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005
LF-12	16-Apr-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-12	30-Jul-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-12	20-Nov-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-12	17-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-12	01-Jul-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
DUP	01-Jul-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-12	20-Aug-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-12	18-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-12	26-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	0.0018	<0.001	<0.001	0.0017	<0.002	<0.002
LF-12	08-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0022	<0.001	<0.001	0.0018	<0.001	<0.001
LF-12	14-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0014	<0.001	<0.001	0.0015	<0.001	<0.001
LF-12	21-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0013	<0.001	<0.001	0.0012	<0.001	<0.001
LF-12	12-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0015	<0.001	<0.001	0.0014	<0.001	<0.001
LF-12	20-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0017	<0.001	<0.001	0.0015	<0.001	<0.001
LF-12	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0014	<0.0005	<0.0005	0.0011	<0.0005	<0.001
LF-12	11-Oct-99	0.0008	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0024	<0.0005	<0.0005	0.0013	<0.0005	<0.001
LF-12	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0008	<0.0005	<0.0005	0.0007	<0.0005	<0.001
LF-12	24-Jan-01	0.0007	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0017	<0.0005	<0.0005	0.0016	<0.0005	<0.001
LF-12	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.001	<0.0005	<0.0005	0.0008	<0.0005	<0.001
LF-12	03-Apr-02	na	na	na	na	na	<0.001	na	na	na	<0.001	na	na	<0.001	na	na	na	<0.001
LF-12	16-Jan-03	0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0012	<0.0005	<0.0005	0.001	<0.0005	<0.001
LF-12	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0013	<0.0005	<0.0005	0.0009	<0.0005	<0.001
LF-12	18-Jan-05	0.0003 J	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0014	<0.0005	<0.0005	0.0008	<0.0005	<0.001
LF-12	26-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0013	<0.0005	<0.0005	0.0009	<0.0005	<0.001
LF-12	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.001	<0.0005	<0.0005	0.0005 J	<0.0005	<0.001
LF-12	18-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-12	13-Apr-09	<0.0005	<0.0005	0.0003 J	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0005 J	<0.0005	<0.0005	0.0003 J	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-11	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-11	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	06-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-12	18-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-12	19-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-12	19-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-12	16-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-12	08-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-12	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-12	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-12	08-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-12	06-Jan-94	<0.003	<0.003	na	<0.003	<0.003	na	na	na	<0.03	na	<0.005	<0.005	<0.005	na	na	na
LF-12	16-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-12	30-Jul-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-12	20-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-12	17-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-12	01-Jul-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
DUP	01-Jul-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-12	20-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-12	18-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-12	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-12	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-12	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-12	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-12	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-12	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-12	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	24-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-12	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	26-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	18-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	13-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-11	15-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-11	27-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	06-Dec-89	na	na	<0.002	na	na	na	na	na	na	na	na
LF-12	18-Jul-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-12	19-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-12	19-Jun-91	na	na	<0.012	na	na	na	na	na	na	na	na
LF-12	16-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-12	08-Jul-92	na	na	na	na	na	na	na	na	na	na	na
LF-12	09-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-12	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na
LF-12	08-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-12	06-Jan-94	na	na	na	<0.003	na	na	<0.03	na	na	na	<0.003
LF-12	16-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-12	30-Jul-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-12	20-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-12	17-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-12	01-Jul-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
DUP	01-Jul-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-12	20-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-12	18-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-12	26-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-12	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-12	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-12	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-12	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-12	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-12	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	18-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	24-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na
LF-12	16-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	20-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	18-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	26-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	17-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	18-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	13-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
DUP	13-Apr-09	<0.0005	<0.0005	0.0003 J	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0005 J	<0.0005	<0.0005	0.0004 J	<0.0005	<0.001
LF-12	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0007	<0.0005	<0.0005	0.0005	<0.0005	<0.001
LF-12	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0013	<0.0005	<0.0005	0.0008	<0.0005	<0.001
LF-12	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.01	0.0014	<0.0005	<0.0005	0.001	<0.0005	<0.001
LF-12	24-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005 J	<0.0005	<0.01	0.0014	<0.0005	<0.0005	0.0011	<0.0005	<0.001
LF-13	06-Dec-89	0.029	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	0.002	na	<0.001	na	<0.001
LF-13	18-Jul-90	0.056	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	0.001	0.002	na	<0.001	na	0.001
LF-13	19-Dec-90	0.042	0.002	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	0.002	<0.001	na	<0.001	na	<0.001
LF-13	19-Jun-91	0.032	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-13	16-Dec-91	0.018	<0.005	na	<0.010	<0.020	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
LF-13	08-Jul-92	0.01	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-13	30-Dec-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-13	08-Jun-93	0.008	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-13	05-Jan-94	0.004	<0.003	<0.003	<0.03	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005
LF-13	16-Apr-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-13	30-Jul-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
DUP	30-Jul-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-13	20-Nov-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-13	17-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
DUP	17-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-13	12-Jun-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-13	19-Aug-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-13	18-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-13	25-Feb-98	0.0025	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	0.015	<0.002	<0.002
LF-13	07-Apr-98	0.0047	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	0.0061	<0.001	<0.001
DUP	07-Apr-98	0.0048	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	0.0085	<0.001	<0.001
LF-13	13-Jul-98	0.0047	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-13	19-Oct-98	0.0049 J2	<0.001 UJ2	<0.001 UJ2	<0.005 UJ2	<0.005 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.005 UJ2	0.001 J2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2
LF-13	11-Jan-99	0.0049	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.001 J11	<0.001	<0.001	<0.001	<0.001	<0.001
LF-13	19-Apr-99	0.0059	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0009 J11	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	19-Apr-99	0.0057	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.001 J11	<0.001	<0.001	<0.001	<0.001	<0.001
LF-13	13-Jul-99	0.0007	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-13	12-Oct-99	0.0055	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0019	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-13	14-Jan-00	0.0049	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-13	18-Jan-01	0.0036	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-13	10-Jan-02	0.0017	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	10-Jan-02	0.0019	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-13	16-Jan-03	0.0012	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	16-Jan-03	0.0012	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
DUP	13-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-12	24-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-13	06-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-13	18-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-13	19-Dec-90	0.002	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-13	19-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-13	16-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-13	08-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-13	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-13	08-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-13	05-Jan-94	<0.003	<0.003	na	<0.003	<0.003	na	na	na	<0.03	na	<0.005	<0.005	<0.005	na	na	na
LF-13	16-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-13	30-Jul-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
DUP	30-Jul-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-13	20-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-13	17-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
DUP	17-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-13	12-Jun-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-13	19-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-13	18-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-13	25-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-13	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-13	13-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-13	19-Oct-98	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.005 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2
LF-13	11-Jan-99	0.0005 J11	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-13	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	19-Apr-99	0.0006 J11	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-13	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-13	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-13	14-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-13	18-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-13	10-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	10-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-13	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
DUP	13-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	29-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	18-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	23-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-12	24-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-13	06-Dec-89	na	na	<0.002	na	na	na	na	na	na	na	na
LF-13	18-Jul-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-13	19-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-13	19-Jun-91	na	na	<0.01	na	na	na	na	na	na	na	na
LF-13	16-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-13	08-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-13	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na
LF-13	08-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-13	05-Jan-94	na	na	na	<0.003	na	na	<0.03	na	na	na	<0.003
LF-13	16-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-13	30-Jul-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
DUP	30-Jul-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-13	20-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-13	17-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
DUP	17-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-13	12-Jun-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-13	19-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-13	18-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-13	25-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-13	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
DUP	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-13	13-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-13	19-Oct-98	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	na	<0.001 UJ2	<0.002 UJ2	<0.001 UJ2	<0.001 UJ2
LF-13	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-13	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
DUP	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-13	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-13	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-13	14-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-13	18-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-13	10-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	10-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-13	16-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	16-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-13	20-Jan-04	0.0009 J	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0008 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-13	18-Jan-05	0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-13	25-Jan-06	0.0004 J	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-13	16-Apr-07	0.0003 J	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	0.0003 J	<0.0005	<0.001
DUP	16-Apr-07	0.0003 J	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-13	13-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-14	04-Sep-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-14	20-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-14	21-Dec-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-14	20-Jun-91	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-14	17-Dec-91	<0.005	<0.005	na	<0.010	<0.020	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
LF-14	08-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-14	09-Jul-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-14	31-Dec-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-14	09-Jun-93	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-15	04-Sep-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-15	20-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-15	21-Dec-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-15	20-Jun-91	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-15	17-Dec-91	<0.005	<0.005	na	<0.010	<0.020	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
LF-15	08-Jul-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-15	30-Dec-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-15	09-Jun-93	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-16	04-Sep-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-16	20-Dec-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-16	20-Jun-91	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-16	17-Dec-91	<0.005	<0.005	na	<0.010	<0.020	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
LF-16	09-Jul-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-16	30-Dec-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-16	09-Jun-93	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-17	02-Mar-98	<0	<0.001	<0.001	<0.02	<0.02	0.042	<0.001	<0.001	0.017	0.043	<0.02	<0.001	0.028	0.017	<0.001	0.012	0.054
LF-17	10-Apr-98	<0	<0.01	<0.01	<0.05	<0.05	0.052	<0.01	<0.01	0.032	0.048	<0.05	<0.01	<0.01	0.02	<0.01	0.016	0.076
LF-17	16-Jul-98	<0.01	<0.01	<0.01	<0.05	<0.05	0.048	<0.01	<0.01	0.024	0.054	<0.05	<0.01	0.12	0.015	<0.01	0.012	0.13
LF-17	23-Oct-98	<0.001	0.0014	<0.001	<0.005	<0.005	0.046	<0.001	<0.001	0.021	0.035	<0.005	<0.001	0.0042	0.016	<0.001	0.013	0.062
LF-17	15-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	0.058	<0.001	<0.001	0.015	0.042	<0.005	<0.001	0.0038	0.018	<0.001	0.011	0.0452
LF-17	22-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	0.061	<0.001	<0.001	0.013	0.045	<0.005	<0.001	0.0029	0.016	<0.001	0.0084	0.0794
LF-17	16-Jul-99	<0.001	<0.001	<0.001	<0.02	<0.02	0.049	<0.001	<0.001	0.0068	0.037	<0.02	<0.001	0.0024	0.014	<0.001	0.0023	0.0657
LF-17	13-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.041	<0.0005	<0.0005	0.0056	0.034	<0.01	<0.0005	0.0024	0.015	<0.0005	0.0043	0.0598
DUP	13-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.041	<0.0005	<0.0005	0.0057	0.034	<0.01	<0.0005	0.0024	0.015	<0.0005	0.0043	0.0598

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-13	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-13	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-13	25-Jan-06	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-13	16-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	16-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-13	13-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-14	04-Sep-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-14	20-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-14	21-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-14	20-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-14	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-14	08-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-14	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-14	31-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-14	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-15	04-Sep-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-15	20-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-15	21-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-15	20-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-15	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-15	08-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-15	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-15	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-16	04-Sep-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-16	20-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-16	20-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-16	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-16	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-16	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-16	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-17	02-Mar-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.01	0.0017	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	0.0074	0.014
LF-17	10-Apr-98	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.028	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	0.016	<0.01
LF-17	16-Jul-98	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.041	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	0.024	0.051
LF-17	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.028	0.0029	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.016	0.023
LF-17	15-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.028	0.0024	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.016	0.023
LF-17	22-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.036	0.0032	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.021	0.028
LF-17	16-Jul-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.024	0.0022	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	0.013	0.024
LF-17	13-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.013	0.0014	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0089	0.014
DUP	13-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.013	0.0014	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0089	0.013

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-13	20-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-13	18-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-13	25-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-13	16-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	16-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-13	13-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-14	04-Sep-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-14	20-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-14	21-Dec-90	na	na	na	na	na	na	na	na	na	na	na
LF-14	20-Jun-91	na	na	<0.011	na	na	na	na	na	na	na	na
LF-14	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-14	08-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-14	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na
LF-14	31-Dec-92	na	na	na	na	na	na	na	na	na	na	na
LF-14	09-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-15	04-Sep-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-15	20-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-15	21-Dec-90	na	na	na	na	na	na	na	na	na	na	na
LF-15	20-Jun-91	na	na	<0.011	na	na	na	na	na	na	na	na
LF-15	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-15	08-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-15	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na
LF-15	09-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-16	04-Sep-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-16	20-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-16	20-Jun-91	na	na	<0.011	na	na	na	na	na	na	na	na
LF-16	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-16	09-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-16	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na
LF-16	09-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-17	02-Mar-98	0.0037	0.0052	0.11	<0.001	0.0052	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-17	10-Apr-98	<0.01	0.017	0.29	<0.01	<0.01	<0.01	na	<0.01	<0.02	<0.01	<0.01
LF-17	16-Jul-98	0.019	0.031	0.37	<0.01	0.016	<0.01	na	<0.01	<0.02	<0.01	<0.01
LF-17	23-Oct-98	0.011	0.021	0.38	<0.001	0.0084	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-17	15-Jan-99	0.0084	0.017	0.27	<0.001	0.0073	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-17	22-Apr-99	0.011	0.023	0.39	<0.001	0.0095	0.0006 J11	na	<0.001	<0.002	<0.001	<0.001
LF-17	16-Jul-99	0.0074	0.013	0.27	<0.001	0.0073	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001
LF-17	13-Oct-99	0.0047	0.0082	0.18	<0.0005	0.0054	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	13-Oct-99	0.0047	0.0081	0.18	<0.0005	0.0053	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-17	20-Jan-00	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.02 UJ	<0.02 UJ	0.054 J	<0.001 UJ	<0.001 UJ	0.012 J	0.037 J	<0.02 UJ	<0.001 UJ	0.0028 J	0.014 J	<0.001 UJ	0.0075 J	0.048 J
LF-17	23-Jan-01	<0.001	<0.001	<0.001	<0.02	<0.02	0.051	<0.001	<0.001	0.0055	0.035	<0.02	<0.001	0.0024	0.012	<0.001	0.0036	0.0385
LF-17	10-Jan-02	<0.0008	<0.0008	<0.0008	<0.016	<0.016	0.039	<0.0008	<0.0008	0.0032	0.025	<0.016	<0.0008	0.0014	0.0072	<0.0008	0.0026	0.033
LF-17	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.052 J	<0.0005	<0.0005	0.0029 J	0.065 J	<0.01	<0.0005	0.0015 J	0.01 J	<0.0005	0.0016 J	0.176 JJ
LF-17	22-Jan-04	<0.0017	<0.0017	<0.0017	<0.033	<0.033	0.042	<0.0017	<0.0017	0.0024	0.047	<0.033	<0.0017	0.0018	0.0083	<0.0017	<0.0017	0.2
LF-17	20-Jan-05	<0.002	<0.002	<0.002	<0.04	<0.04	0.045	<0.002	<0.002	0.0025	0.021	<0.04	<0.002	0.0016 J	0.0086	<0.002	<0.002	0.1211 J
LF-17	24-Jan-06	<0.002	<0.002	<0.002	<0.04	<0.04	0.043	<0.002	<0.002	0.0019 J	0.016	<0.04	<0.002	0.0013 J	0.0068	<0.002	<0.002	0.15
LF-17	18-Apr-07	<0.0013	<0.0013	<0.0013	<0.025	<0.025	0.048	<0.0013	<0.0013	0.0012 J	0.052	<0.025	<0.0013	0.027	0.0057	<0.0013	0.0007 J	0.3235
LF-17	15-Apr-08	<0.002	<0.002	<0.002	<0.04	<0.04	0.052	<0.002	<0.002	0.0014 J	0.092	<0.04	<0.002	0.001 J	0.0058	0.0021	<0.002	0.5598
LF-17	15-Apr-09	<0.002	<0.002	<0.002	<0.04	<0.04	0.055	<0.002	<0.002	0.0015 J	0.058	<0.04	<0.002	<0.002	0.0052	<0.002	<0.002	0.6918 J
LF-17	26-Apr-10	<0.001	<0.001	<0.001	<0.02	<0.02	0.037	<0.001	<0.001	0.0006 J	0.018	<0.02	<0.001	0.0008 J	0.0031	<0.001	0.0006 J	0.3507 J
DUP	26-Apr-10	<0.001	<0.001	<0.001	<0.02	<0.02	0.037	<0.001	<0.001	0.0007 J	0.018	<0.02	<0.001	0.0007 J	0.0031	<0.001	0.0005 J	0.3507 J
LF-18	11-Apr-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-18	30-Jul-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-18	20-Nov-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-18	19-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-18	11-Jun-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
DUP	11-Jun-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-18	19-Aug-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-18	17-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-18	27-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-18	08-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-18	15-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	15-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-18	21-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-18	13-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-18	21-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	21-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-18	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	13-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	19-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	22-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	10-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mgLl)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-17	20-Jan-00	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	0.014 J	0.0024 J	<0.02 UJ	<0.001 UJ	<0.001 UJ	<0.002 UJ	<0.002 UJ	<0.002 UJ	0.02 J	0.027 J
LF-17	23-Jan-01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.01	0.0016	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	0.01	0.017
LF-17	10-Jan-02	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0053	0.0021	<0.016	<0.0008	<0.0008	<0.0016	<0.0016	<0.0016	0.0088	0.02
LF-17	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0039 J	0.0014 J	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.014 J	0.015 J
LF-17	22-Jan-04	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	0.0042	0.0017	<0.033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	0.012	0.021
LF-17	20-Jan-05	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0024	0.0013 J	<0.04	<0.002	<0.002	<0.004	<0.004	<0.004	0.013	<0.002
LF-17	24-Jan-06	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0026	0.0015 J	<0.04	<0.002	<0.002	<0.004	<0.004	<0.004	0.014	0.039
LF-17	18-Apr-07	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0041	0.002	<0.025	<0.0013	<0.0013	<0.0025	<0.0025	<0.0025	0.018	0.028
LF-17	15-Apr-08	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0024	0.001 J	<0.04	<0.002	<0.002	<0.004	<0.004	<0.004	0.01	<0.002
LF-17	15-Apr-09	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0049	0.0014 J	<0.04	<0.002	<0.002	<0.004	<0.004	<0.004	0.012	<0.002
LF-17	26-Apr-10	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0023	0.0008 J	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	0.0081	<0.001
DUP	26-Apr-10	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0022	0.0007 J	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	0.0084	<0.001
LF-18	11-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-18	30-Jul-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-18	20-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-18	19-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-18	11-Jun-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
DUP	11-Jun-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-18	19-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-18	17-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-18	27-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-18	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-18	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-18	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-18	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-18	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-18	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	13-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	19-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	22-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	10-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-17	20-Jan-00	0.0086 J	0.021 J	0.27 J	<0.001 UJ	0.0095 J	<0.001 UJ	<0.02 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ
LF-17	23-Jan-01	0.0034	0.0087	0.18	<0.001	0.0056	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001
LF-17	10-Jan-02	0.0053	0.0078	0.21	<0.0008	0.006	<0.0008	<0.016	<0.0008	<0.0008	<0.0008	<0.0008
LF-17	20-Jan-03	0.0031 J	0.011 J	0.21 J	<0.0005	0.0062 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-17	22-Jan-04	0.0033	0.011	0.29	<0.0017	0.0058	<0.0017	<0.033	<0.0017	<0.0017	<0.0017	<0.0017
LF-17	20-Jan-05	0.0031	0.013	0.27	<0.002	0.0061	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002
LF-17	24-Jan-06	0.0035	0.013	0.24	<0.002	0.0073	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002
LF-17	18-Apr-07	0.0051	0.017	0.25	<0.0013	0.0092	0.0007 J	<0.025	<0.0013	<0.0013	<0.0013	<0.0013
LF-17	15-Apr-08	0.0016 J	0.009	0.17	<0.002	0.0046	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002
LF-17	15-Apr-09	0.0023	0.01	0.18	<0.002	0.0058	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002
LF-17	26-Apr-10	0.0014	0.0064	0.16	<0.001	0.0037	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001
DUP	26-Apr-10	0.0016	0.007	0.16	<0.001	0.0042	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001
LF-18	11-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-18	30-Jul-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-18	20-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-18	19-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-18	11-Jun-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
DUP	11-Jun-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-18	19-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-18	17-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-18	27-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-18	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-18	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
DUP	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-18	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-18	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-18	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
DUP	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-18	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-18	13-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-18	19-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-18	22-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-18	10-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-18	20-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-18	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-18	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-18	24-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-18	20-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-18	14-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-18	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	16-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	16-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-18	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0002 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-19	13-Jun-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-19	19-Aug-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	0.0006	na	na	na	<0.002
LF-19	27-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	0.0023	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-19	08-Apr-98	<0	<0.001	<0.001	<0.005	0.0074	<0.001	0.0025	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-19	15-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0028	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-19	23-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0024	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	23-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0025	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-19	13-Jan-99	<0.001	<0.001	<0.001	<0.005	0.0066	<0.001	0.003	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-19	20-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.01 U5	<0.001	0.0033	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-19	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0033	<0.0005	<0.0005	0.0006	<0.01	<0.0005	0.026	<0.0005	<0.0005	<0.0005	0.0022
LF-19	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.003	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-2	02-Jun-89	<0	<0.005	na	<0.005	<0.05	0.015	<0.005	na	na	0.015	<0.1	<0.005	<0.005	na	<0.005	na	0.3
LF-2	07-Dec-89	<0	<0.02	na	<0.02	0.35	<0.02	<0.02	na	na	<0.02	<0.4	<0.02	0.029	na	<0.02	na	0.84
LF-2	20-Jul-90	<0	<0.05	na	12	<0.5	<0.05	0.05	na	na	0.066	8.8	<0.05	0.051	na	<0.05	na	0.91
LF-20	11-Apr-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-20	30-Jul-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-20	21-Nov-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-20	18-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-20	11-Jun-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-20	19-Aug-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-20	18-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-20	27-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	0.0041	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-20	09-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	0.0042	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	09-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	0.004	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-20	16-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0044	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-20	23-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0039	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-20	13-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0043	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	13-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0041	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-20	21-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0036	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-20	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0039	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0035	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	20-Jan-00	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.01 UJ	<0.01 UJ	<0.0005 UJ	0.0037 J	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.01 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.001 UJ
LF-20	01-May-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0033	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-18	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	16-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	16-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-18	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-19	13-Jun-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-19	19-Aug-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-19	27-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-19	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-19	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-19	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-19	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-19	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-19	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-19	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-2	02-Jun-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-2	07-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-2	20-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-20	11-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-20	30-Jul-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-20	21-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-20	18-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-20	11-Jun-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-20	19-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-20	18-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-20	27-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-20	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-20	16-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-20	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-20	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-20	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-20	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	20-Jan-00	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.01 UJ	<0.0005 UJ	<0.0005 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.0005 UJ	<0.0005 UJ
LF-20	01-May-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-18	16-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
LF-18	27-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-18	16-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	16-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-18	23-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0001 J	<0.0005	<0.0005
LF-18	29-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-19	13-Jun-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-19	19-Aug-97	na	na	na	na	na	na	na	na	na	na	na
LF-19	27-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-19	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-19	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-19	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
DUP	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-19	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-19	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-19	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-19	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-2	02-Jun-89	na	na	0.65	na	na	na	na	na	na	na	na
LF-2	07-Dec-89	na	na	0.32	na	na	na	na	na	na	na	na
LF-2	20-Jul-90	na	na	0.33	na	na	na	na	na	na	na	na
LF-20	11-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-20	30-Jul-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-20	21-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-20	18-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-20	11-Jun-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-20	19-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-20	18-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-20	27-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-20	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
DUP	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-20	16-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-20	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-20	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
DUP	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-20	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0005 J11	na	<0.001	<0.002	<0.001	<0.001
LF-20	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	20-Jan-00	<0.0005 UJ	<0.0005 UJ	<0.001 UJ	<0.0005 UJ	<0.0005 UJ	0.0005 J	<0.01 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ
LF-20	01-May-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-20	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0039	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0041	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	22-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0039	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0031	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0036	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0042	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0026	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0029	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0039	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	10-Oct-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0035	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0024 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0033	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0035	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	28-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0036	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0027 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	04-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0016	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0038	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0031	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0017	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0014	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	21-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0015	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0028 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0025	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	19-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0021	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	19-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0021	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0023	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0015	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-20	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	10-Apr-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-21	31-Jul-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-21	21-Nov-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-21	18-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-21	11-Jun-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-21	19-Aug-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-21	17-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-21	02-Mar-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-20	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	22-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	10-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	28-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	04-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	11-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	21-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	19-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-20	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	10-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-21	31-Jul-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-21	21-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-21	18-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-21	11-Jun-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-21	19-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-21	17-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-21	02-Mar-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-20	24-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	22-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	10-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	06-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	15-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	09-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	09-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	10-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	20-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	16-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	09-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	28-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	04-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	15-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	11-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	21-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	26-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	24-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	19-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0008	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	19-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0007	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	17-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	14-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	17-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-20	27-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	27-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	10-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-21	31-Jul-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-21	21-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-21	18-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-21	11-Jun-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-21	19-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-21	17-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-21	02-Mar-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
DUP	02-Mar-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-21	09-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-21	16-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-21	23-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-21	14-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-21	22-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-21	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	20-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	24-Jul-00	<0.0005	0.0083	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	23-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	23-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	18-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	10-Oct-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	28-Oct-03	<0.0005	0.0036	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	04-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	21-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	19-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-21	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
DUP	02-Mar-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-21	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-21	16-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-21	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-21	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-21	22-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-21	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	20-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	23-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	23-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	18-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	10-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	28-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	04-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	21-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	19-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-21	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
DUP	02-Mar-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-21	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-21	16-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-21	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-21	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-21	22-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-21	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	20-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	27-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	24-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	0.065	<0.0005	0.015	<0.0005	<0.0005
LF-21	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	23-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	23-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	10-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	06-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	18-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	09-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	10-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	16-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	16-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	16-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	09-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	28-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.015	<0.0005	<0.0005
LF-21	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	04-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	15-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	14-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	14-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	20-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	21-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	26-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	19-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-21	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-22	02-Mar-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0049	<0.001	<0.02	<0.001	<0.001	<0.001	0.0049	<0.002	<0.002
LF-22	10-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0071	<0.001	<0.005	<0.001	<0.001	<0.001	0.0058	<0.001	<0.001
LF-22	15-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0041	<0.001	<0.005	0.0009 J11	<0.001	0.0013	0.01	<0.001	<0.001
LF-22	20-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0023	<0.0005	<0.01	<0.0005	<0.0005	0.0012	0.0056	<0.0005	<0.001
LF-22	02-Feb-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0031	<0.0005	<0.01	<0.0005	<0.0005	0.0022	0.002	<0.0005	<0.001
LF-22	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0033	<0.0005	<0.01	<0.0005	<0.0005	0.0036	0.0009	<0.0005	<0.001
LF-22	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0026 J	<0.0005	<0.01	<0.0005	<0.0005	0.0017 J	0.0016 J	<0.0005	<0.001
LF-22	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0021	<0.0005	<0.01	<0.0005	<0.0005	0.0016	0.0008	<0.0005	<0.001
LF-22	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0028	<0.0005	<0.01	<0.0005	<0.0005	0.0027	0.0008	<0.0005	<0.001
LF-22	25-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0029	<0.0005	<0.01	<0.0005	<0.0005	0.0029	0.0009	<0.0005	<0.001
LF-22	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0026	<0.0005	<0.01	0.001	<0.0005	0.0025	0.0044	<0.0005	<0.001
LF-22	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0005 J	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-22	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.002	<0.0005	<0.01	0.0009	<0.0005	0.0021	0.0031	<0.0005	<0.001
LF-22	30-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	0.0004 J	<0.0005	0.0018	0.0017	<0.0005	<0.001
LF-23	10-Apr-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
DUP	10-Apr-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-23	02-Aug-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-23	21-Nov-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-23	18-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	0.01	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-23	11-Jun-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-23	20-Aug-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-23	18-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-23	26-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-23	08-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	0.002	<0.001	<0.001	<0.001	0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-23	15-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.0095 U5	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-23	21-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-23	12-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-23	21-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-23	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-23	21-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-23	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-24	11-Apr-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-24	02-Aug-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-24	21-Nov-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-24	18-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-24	11-Jun-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-24	20-Aug-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-24	18-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-24	26-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-22	02-Mar-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-22	10-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-22	15-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-22	20-Jan-00	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-22	02-Feb-01	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-22	08-Jan-02	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-22	20-Jan-03	0.0005 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-22	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-22	20-Jan-05	0.0005 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-22	25-Jan-06	0.0004 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-22	18-Apr-07	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-22	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-22	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-22	30-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-23	10-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
DUP	10-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-23	02-Aug-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-23	21-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-23	18-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-23	11-Jun-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-23	20-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-23	18-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-23	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-23	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-23	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-23	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-23	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-23	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-23	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-23	21-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-23	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-24	11-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-24	02-Aug-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-24	21-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-24	18-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-24	11-Jun-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-24	20-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-24	18-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-24	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-22	02-Mar-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-22	10-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-22	15-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-22	20-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-22	02-Feb-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-22	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
LF-22	20-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-22	22-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-22	20-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-22	25-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-22	18-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-22	15-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-22	17-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-22	30-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-23	10-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
DUP	10-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-23	02-Aug-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-23	21-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-23	18-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-23	11-Jun-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-23	20-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-23	18-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-23	26-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-23	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-23	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-23	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-23	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-23	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-23	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-23	21-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-23	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-24	11-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-24	02-Aug-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-24	21-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-24	18-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-24	11-Jun-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-24	20-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-24	18-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-24	26-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-24	08-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-24	15-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-24	21-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-24	12-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-24	21-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-24	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-24	21-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	21-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-24	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-24	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-24	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-24	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-24	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-24	16-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-24	19-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-24	13-May-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01 U6	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	13-May-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-25	11-Apr-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-25	02-Aug-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-25	21-Nov-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-25	18-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-25	11-Jun-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-25	20-Aug-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-25	18-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-25	26-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-25	08-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-25	15-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-25	21-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-25	12-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-25	21-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-25	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-25	21-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-25	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-25	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-25	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-25	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-25	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-25	16-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-24	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-24	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-24	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-24	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-24	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-24	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-24	21-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	21-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-24	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-24	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-24	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-24	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-24	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-24	16-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-24	19-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-24	13-May-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	13-May-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-25	11-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-25	02-Aug-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-25	21-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-25	18-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-25	11-Jun-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-25	20-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-25	18-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-25	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-25	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-25	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-25	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-25	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-25	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-25	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-25	21-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-25	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-25	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-25	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-25	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-25	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-25	16-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-24	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-24	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-24	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-24	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-24	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-24	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-24	21-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	21-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-24	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-24	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-24	15-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-24	16-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-24	23-Feb-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-24	16-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-24	19-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-24	13-May-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	13-May-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-25	11-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-25	02-Aug-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-25	21-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-25	18-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-25	11-Jun-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-25	20-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-25	18-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-25	26-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-25	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-25	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-25	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-25	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-25	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-25	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-25	21-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-25	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-25	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-25	15-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	15-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-25	16-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-25	23-Feb-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-25	16-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-25	19-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	19-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-25	13-May-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01 U5	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	27-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	0.0036	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-26	09-Apr-98	<0	<0.001	<0.001	<0.005	<0.0056 U5	<0.001	0.0033	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-26	16-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0033	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-26	23-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0024	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-26	13-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0034	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-26	21-Apr-99	<0.001	<0.001	<0.001	<0.005	0.0062	<0.001	0.0031	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0025	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0028	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	20-Jan-00	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.01 UJ	<0.01 UJ	<0.0005 UJ	0.003 J	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.01 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.001 UJ
DUP	20-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0034	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	22-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0039	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0041	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0047 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0049	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0045	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	26-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0039	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	0.0067 J	<0.0005	0.004	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0048	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0048	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0045	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-26	18-Apr-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.005	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	18-Apr-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0048	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-27	29-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-27	26-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	0.0022	<0.002	<0.002
LF-27	08-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	0.0021	<0.001	<0.001
LF-27	14-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	0.0019	<0.001	<0.001
LF-27	21-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	0.0017	<0.001	<0.001
LF-27	12-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0006 J11	<0.001	<0.001	0.0018	<0.001	<0.001
LF-27	20-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0007 J11	<0.001	<0.001	0.0019	<0.001	<0.001
LF-27	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	0.0016	<0.0005	<0.001
DUP	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	0.0015	<0.0005	<0.001
LF-27	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0015	<0.0005	<0.0005	0.0018	<0.0005	<0.001
LF-27	17-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.001
DUP	17-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.001
LF-27	24-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.001
LF-27	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-25	19-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-25	13-May-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	27-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	0.0012	<0.001
LF-26	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
LF-26	16-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-26	23-Oct-98	<0.001	<0.001	<0.001	0.0011	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-26	13-Jan-99	<0.001	<0.001	0.0006 J11	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0006 J11	<0.001
LF-26	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	20-Jan-00	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.01 UJ	<0.0005 UJ	<0.0005 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.0005 UJ	<0.0005 UJ
DUP	20-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	22-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	19-Jan-05	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	26-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-26	18-Apr-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	18-Apr-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	29-Dec-97	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-27	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-27	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-27	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-27	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-27	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-27	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-27	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	17-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	17-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	24-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-25	19-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	19-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-25	13-May-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-26	27-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-26	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-26	16-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-26	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-26	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-26	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
DUP	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-26	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-26	20-Jan-00	<0.0005 UJ	<0.0005 UJ	<0.001 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.01 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ	<0.0005 UJ
DUP	20-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-26	22-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-26	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-26	20-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-26	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-26	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
LF-26	26-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-26	17-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-26	14-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-26	16-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-26	26-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-26	18-Apr-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	18-Apr-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	29-Dec-97	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-27	26-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-27	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-27	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-27	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-27	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-27	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-27	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	17-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	17-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	24-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-27	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.001
DUP	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	0.0009	<0.0005	<0.001
LF-27	03-Apr-02	na	na	na	na	na	<0.001	na	na	na	<0.001	na	na	<0.001	na	na	na	<0.001
LF-27	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.001
LF-27	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.001
LF-27	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	0.001	<0.0005	<0.001
DUP	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.001
LF-27	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0005 J	<0.0005	<0.0005	0.0008	<0.0005	<0.001
LF-27	26-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0005 J	<0.0005	<0.0005	0.0007	<0.0005	<0.001
LF-27	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.001
LF-27	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0005 J	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-27	13-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.01	0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.001
LF-27	29-Apr-10	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	0.0003 J	<0.0005	<0.0005	0.0029	<0.0005	<0.001
LF-28	29-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	0.029	<0.005	<0.1	<0.005	<0.005	0.011	0.005	<0.01	<0.01
LF-28	26-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.02	<0.001	<0.02	<0.001	<0.001	0.0066	0.0034	<0.002	<0.002
LF-28	08-Apr-98	<0	0.0018	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.029	<0.001	<0.005	<0.001	<0.001	0.0088	0.0061	<0.001	<0.001
LF-28	14-Jul-98	<0.001	0.0022	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.029	<0.001	<0.005	<0.001	<0.001	0.0097	0.0071	<0.001	<0.001
LF-28	21-Oct-98	<0.002	0.0037	<0.002	<0.01	<0.01	<0.002	<0.002	<0.002	0.041	<0.002	<0.01	<0.002	<0.002	0.015	0.013	<0.002	<0.002
LF-28	12-Jan-99	<0.001	0.0026	<0.001	<0.005	<0.005	0.0006 J11	<0.001	<0.001	0.029	<0.001	<0.005	<0.001	<0.001	0.011	0.0088	<0.001	<0.001
DUP	12-Jan-99	<0.001	0.0023	<0.001	<0.005	<0.005	0.0006 J11	<0.001	<0.001	0.027	<0.001	<0.005	<0.001	<0.001	0.011	0.0074	0.0005 J11	<0.001
LF-28	20-Apr-99	<0.001	0.0021	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.026	<0.001	<0.005	<0.001	<0.001	0.01	0.0059	0.0005 J11	<0.001
LF-28	14-Jul-99	<0.0005	0.003	<0.0005	<0.01	<0.01	0.0006	<0.0005	<0.0005	0.034	<0.0005	<0.01	<0.0005	<0.0005	0.014	0.0094	<0.0005	<0.001
LF-28	11-Oct-99	<0.0005	0.004	<0.0005	<0.01	<0.01	0.0007	<0.0005	<0.0005	0.045	<0.0005	<0.01	<0.0005	<0.0005	0.019	0.015	<0.0005	<0.001
LF-28	17-Jan-00	<0.0005	0.0029	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.032	<0.0005	<0.01	<0.0005	<0.0005	0.012	0.0088	<0.0005	<0.001
LF-28	28-Apr-00	<0.0005	0.0021	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.024	<0.0005	<0.01	<0.0005	<0.0005	0.0088	0.0055	<0.0005	<0.001
LF-28	25-Jul-00	<0.0005	0.0032	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.03	<0.0005	<0.01	<0.0005	0.0009	0.01	<0.0082	<0.0005	<0.001
LF-28	10-Oct-00	<0.0005	0.005	<0.0005	<0.01	<0.01	0.0006	<0.0005	<0.0005	0.048	<0.0005	<0.01	<0.0005	<0.0005	0.017	0.016	<0.0005	<0.001
LF-28	24-Jan-01	<0.0005	0.0038	<0.0005	<0.01	<0.01	0.0005	<0.0005	<0.0005	0.036	<0.0005	<0.01	<0.0005	<0.0005	0.012	0.01	<0.0005	<0.001
LF-28	09-Apr-01	<0.0005	0.0015	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.026	<0.0005	<0.01	<0.0005	<0.0005	0.008	0.0043	<0.0005	<0.001
LF-28	05-Jul-01	<0.0005	0.0032	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.034	<0.0005	<0.01	<0.0005	<0.0005	0.011	0.01	<0.0005	<0.001
LF-28	15-Oct-01	<0.0005	0.0033	<0.0005	<0.01	<0.01	0.0006	<0.0005	<0.0005	0.039	<0.0005	<0.01	<0.0005	<0.0005	0.012	0.0087	<0.0005	<0.001
LF-28	09-Jan-02	<0.0005	0.0022	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.023	<0.0005	<0.01	<0.0005	<0.0005	0.0084	0.0051	<0.0005	<0.001
LF-28	03-Apr-02	na	na	na	na	na	<0.001	na	na	na	<0.001	na	na	<0.001	na	na	na	0.00148
LF-28	09-Apr-02	<0.0005	0.0033	<0.0005	<0.01	<0.01	0.0005	<0.0005	<0.0005	0.036	<0.0005	<0.01	<0.0005	<0.0005	0.011	0.011	<0.0005	<0.001
LF-28	08-Jul-02	<0.0005	0.0016	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.026	<0.0005	<0.01	<0.0005	<0.0005	0.0083	0.0045	<0.0005	<0.001
LF-28	09-Oct-02	<0.0005	0.0034	<0.0005	<0.01	<0.01	0.0004 J	<0.0005	<0.0005	0.038	<0.0005	<0.01	<0.0005	<0.0005	0.011	0.012	<0.0005	<0.001
LF-28	16-Jan-03	<0.0005	0.0015	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.021	<0.0005	<0.01	<0.0005	<0.0005	0.0068	0.0044	<0.0005	<0.001
LF-28	16-Apr-03	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.01	<0.0005	<0.0005	0.0052	0.0026	<0.0005	<0.001
LF-28	09-Jul-03	<0.0005	0.0021	<0.0005	<0.01	<0.01	0.0005	<0.0005	<0.0005	0.031	<0.0005	<0.01	<0.0005	<0.0005	0.011	0.0089	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-27	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-27	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	26-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	13-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-27	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	29-Dec-97	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-28	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-28	08-Apr-98	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-28	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-28	21-Oct-98	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
LF-28	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-28	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-28	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	17-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	24-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	05-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-28	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	09-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-27	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na
LF-27	16-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	20-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	14-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	14-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	18-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	26-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	17-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	15-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	13-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-27	29-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-28	29-Dec-97	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-28	26-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-28	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-28	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-28	21-Oct-98	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	na	<0.002	<0.004	<0.002	<0.002
LF-28	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0014 J11	<0.001	<0.001
DUP	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0013 J11	<0.001	<0.001
LF-28	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0013 J11	<0.001	<0.001
LF-28	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0018	<0.0005	<0.0005
LF-28	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0019	<0.0005	<0.0005
LF-28	17-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0015	<0.0005	<0.0005
LF-28	28-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
LF-28	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
LF-28	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0021	<0.0005	<0.0005
LF-28	24-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0015	<0.0005	<0.0005
LF-28	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-28	05-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
LF-28	15-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0019	<0.0005	<0.0005
LF-28	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
LF-28	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na
LF-28	09-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-28	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-28	09-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-28	16-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-28	16-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-28	09-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-28	29-Oct-03	<0.0005	0.002	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.028	<0.0005	<0.01	<0.0005	<0.0005	0.0093	0.0069	<0.0005	<0.001
LF-28	20-Jan-04	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	<0.0005	<0.0005	0.0056	0.0024	<0.0005	<0.001
LF-28	04-May-04	<0.0005	0.0021	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.026	<0.0005	<0.01	<0.0005	<0.0005	0.0089	0.0075	<0.0005	<0.001
LF-28	15-Jul-04	<0.0005	0.0024	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.036	<0.0005	<0.01	<0.0005	<0.0005	0.012	0.0099	<0.0005	<0.001
LF-28	13-Oct-04	<0.0005	0.002	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.027	<0.0005	<0.01	<0.0005	<0.0005	0.0083	0.0063	<0.0005	<0.001
LF-28	18-Jan-05	<0.0005	0.0015	<0.0005	<0.01	<0.01	0.0003 J	<0.0005	<0.0005	0.017	<0.0005	<0.01	<0.0005	<0.0005	0.0062	0.0051	<0.0005	<0.001
LF-28	20-Apr-05	<0.0005	0.0017	<0.0005	<0.01	<0.01	0.0004 J	<0.0005	<0.0005	0.026	<0.0005	<0.01	<0.0005	<0.0005	0.0097	0.0069	<0.0005	<0.001
LF-28	19-Jul-05	<0.0005	0.0024	<0.0005	<0.01	<0.01	0.0004 J	<0.0005	<0.0005	0.031	<0.0005	<0.01	<0.0005	<0.0005	0.011	0.0086	<0.0005	<0.001
DUP	19-Jul-05	<0.0005	0.0018	<0.0005	<0.01	<0.01	0.0003 J	<0.0005	<0.0005	0.025	<0.0005	<0.01	<0.0005	<0.0005	0.0082	0.0062	<0.0005	<0.001
LF-28	27-Oct-05	<0.0005	0.0023	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.034	<0.0005	<0.01	<0.0005	<0.0005	0.013	0.0095	<0.0005	<0.001
DUP	27-Oct-05	<0.0005	0.0023	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.035	<0.0005	<0.01	<0.0005	<0.0005	0.012	0.0088	<0.0005	<0.001
LF-28	27-Jan-06	<0.0005	0.0016	<0.0005	<0.01	<0.01	0.0003 J	<0.0005	<0.0005	0.022	<0.0005	<0.01	<0.0005	<0.0005	0.0081	0.0064	<0.0005	<0.001
LF-28	18-Apr-06	<0.0005	0.0014	<0.0005	<0.01	<0.01	0.0003 J	<0.0005	<0.0005	0.019	<0.0005	<0.01	<0.0005	<0.0005	0.0062	0.0054	<0.0005	<0.001
LF-28	16-Apr-07	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.01	<0.0005	<0.01	<0.0005	<0.0005	0.0037	0.0035	<0.0005	<0.001
LF-28	17-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	0.0003 J	<0.0005	<0.001
LF-28	13-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	0.0004 J	<0.0005	<0.001
LF-28	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	0.0003 J	<0.0005	<0.001
LF-28	12-Oct-11	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0057	<0.0005	<0.01	<0.0005	<0.0005	0.0024	0.0016	<0.0005	<0.001
LF-28	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	<0.0005	<0.0005	0.001	0.0007	<0.0005	<0.001
LF-28	23-Apr-13	<0.0005	0.0002 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	<0.0005	<0.0005	0.0007	0.0004 J	<0.0005	<0.001
LF-28	24-Apr-14	<0.0005	0.0002 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	<0.0005	<0.0005	0.0007	0.0005 J	<0.0005	<0.001
LF-29	29-Dec-97	<0	<0.03	0.21	<0.3	<0.5	<0.03	<0.03	<0.03	<0.03	<0.03	<0.5	<0.03	<0.03	<0.03	<0.03	<0.05	<0.05
LF-29	25-Feb-98	<0	0.013	0.17	<0.04	<0.04	0.016	<0.002	0.0039	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	0.011	<0.004	<0.004
LF-29	07-Apr-98	<0	0.015	0.19	<0.05	<0.05	0.019	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	0.013	<0.01	<0.001
LF-29	14-Jul-98	<0.01	0.013	0.22	<0.05	<0.05	0.02	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	0.012	<0.01	<0.01
LF-29	20-Oct-98	<0.005	0.012	0.19	<0.025	<0.025	0.018	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	0.0087	<0.005	<0.005
LF-29	11-Jan-99	<0.001	0.012	0.2	<0.005	<0.005	0.014	0.0009 J11	0.0029	0.0023	<0.001	<0.005	0.0006 J11	0.016	<0.001	0.012	0.0036	0.0021
LF-29	20-Apr-99	<0.001	0.01	0.16	<0.005	<0.005	0.016	0.0009 J11	0.003	0.0022	<0.001	<0.005	0.0006 J11	<0.001	<0.001	0.012	0.003	0.0015
DUP	20-Apr-99	<0.001	0.01	0.16	<0.005	<0.005	0.017	0.0009 J11	0.0031	0.0023	<0.001	<0.005	0.0006 J11	<0.001	<0.001	0.011	0.0027	0.002 J11
LF-29	13-Jul-99	<0.0005	0.012	0.17	<0.01	<0.01	0.02	0.0011	0.0029	0.0026	<0.0005	<0.01	0.0005	0.018	<0.0005	0.012	0.0037	0.0023
LF-29	11-Oct-99	<0.0005	0.011	0.17	<0.01	<0.01	0.018	0.0011	0.0024	0.0024	<0.0005	<0.01	0.0005	0.014	<0.0005	0.012	0.0039	0.0023
DUP	11-Oct-99	<0.0005	0.011	0.17	<0.01	<0.01	0.019	0.0009	0.0024	0.0024	<0.0005	<0.01	<0.0005	0.014	<0.0005	0.012	0.0034	0.0023
LF-29	17-Jan-00	<0.0005	0.011	0.19	<0.01	<0.01	0.02	0.001	0.0028	0.0026	<0.0005	0.015	0.0005	0.017	<0.0005	0.012	0.0036	0.0022
LF-29	24-Jan-01	<0.0005	0.013	0.2	<0.01	<0.01	0.017	0.0008	0.0032	0.002	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.01	0.0032	0.0012
LF-29	09-Jan-02	<0.0005	0.0099	0.16	<0.01	<0.01	0.012	0.0007	0.0024	0.0013	<0.0005	0.021	<0.0005	0.019	<0.0005	0.0071	0.0028	0.0008
LF-29	03-Apr-02	na	na	na	na	na	0.0153	na	na	na	<0.001	na	na	<0.001	na	na	na	0.00222
LF-29	17-Jan-03	<0.0007	0.011	0.18	<0.014	<0.014	0.017	0.0008	0.0021	0.0017	<0.0007	<0.014	<0.0007	<0.0007	<0.0007	0.0093	0.0027	0.0011
LF-29	20-Jan-04	<0.0008	0.012	0.2	<0.017	<0.017	0.019	0.0009	0.0021	0.0017	<0.0008	<0.017	<0.0008	<0.0008	<0.0008	0.0084	0.0032	0.001
LF-29	26-Jan-06	<0.001	0.0097	0.15	<0.02	<0.02	0.017	0.0009 J	0.0014	0.0017	<0.001	<0.02	<0.001	<0.001	<0.001	0.0076	0.0033	0.0008 J

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-28	29-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	04-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	20-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	27-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	27-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	18-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	16-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	17-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	13-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	12-Oct-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	18-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	23-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-28	24-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-29	29-Dec-97	<0.03	<0.03	<0.01	<0.03	<0.03	na	na	na	<0.3	na	<0.05	<0.05	<0.05	na	na	na
LF-29	25-Feb-98	<0.002	<0.002	<0.002	<0.002	<0.002	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.004	<0.004	<0.002	<0.002
LF-29	07-Apr-98	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LF-29	14-Jul-98	<0.01	<0.01	<0.01	<0.01	<0.01	0.021	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LF-29	20-Oct-98	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
LF-29	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.017	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0007 J11	<0.001
LF-29	20-Apr-99	0.0005 J11	<0.001	<0.001	<0.001	<0.001	0.014	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0008 J11	<0.001
DUP	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.016	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0008 J11	<0.001
LF-29	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	<0.0005
LF-29	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0014 J10	<0.0005
DUP	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008 J10	<0.0005
LF-29	17-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0009	<0.0005
LF-29	24-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0007	<0.0005
LF-29	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0006	<0.0005
LF-29	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-29	17-Jan-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	0.015	<0.0007	<0.0007	<0.014	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0007	<0.0007
LF-29	20-Jan-04	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.015	<0.0008	<0.0008	<0.017	<0.0008	<0.0008	<0.0017	<0.0017	<0.0017	<0.0008	<0.0008
LF-29	26-Jan-06	<0.001	<0.001	<0.001	<0.001	<0.001	0.012	<0.001	<0.001	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	0.0007 J	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-28	29-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-28	20-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-28	04-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
LF-28	15-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-28	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-28	18-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-28	20-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-28	19-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
DUP	19-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-28	27-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
DUP	27-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-28	27-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-28	18-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-28	16-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
LF-28	17-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-28	13-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-28	29-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-28	12-Oct-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0002 J	<0.0005	<0.0005
LF-28	18-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-28	23-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-28	24-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-29	29-Dec-97	na	na	<0.01	<0.03	na	na	<0.3	<0.01	na	na	<0.03
LF-29	25-Feb-98	<0.002	<0.002	<0.01	<0.002	<0.002	0.008	<0.002	<0.002	<0.004	<0.002	<0.002
LF-29	07-Apr-98	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	na	<0.01	<0.002	<0.01	<0.01
LF-29	14-Jul-98	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	na	<0.01	<0.002	<0.01	<0.01
LF-29	20-Oct-98	<0.005	<0.005	<0.005	<0.005	<0.005	0.0074	na	<0.005	<0.01	<0.005	<0.005
LF-29	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0081	na	<0.001	<0.002	<0.001	<0.001
LF-29	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0089	na	<0.001	<0.002	<0.001	<0.001
DUP	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0085	na	<0.001	<0.002	<0.001	<0.001
LF-29	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0084	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-29	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0087	<0.01	<0.0005	0.0006	<0.0005	<0.0005
DUP	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0089	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-29	17-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0091	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-29	24-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0079	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-29	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0071	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-29	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na
LF-29	17-Jan-03	<0.0007	<0.0007	<0.0029	<0.0007	<0.0007	0.0075	<0.014	<0.0007	<0.0007	<0.0007	<0.0007
LF-29	20-Jan-04	<0.0008	<0.0008	<0.0033	<0.0008	<0.0008	0.0079	<0.017	<0.0008	<0.0008	<0.0008	<0.0008
LF-29	26-Jan-06	<0.001	<0.001	<0.004	<0.001	<0.001	0.0067	<0.02	<0.001	<0.001	<0.001	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-29	16-Apr-07	<0.0005	0.0036	0.043	<0.01	<0.01	0.0076	0.0007	<0.0005	0.0009	<0.0005	<0.01	0.0006	<0.0005	<0.0005	0.0053	0.0022	0.0005
LF-29	15-Apr-08	<0.0005	0.0063	0.044	<0.01	<0.01	0.0076	0.0006	0.0006	0.001	<0.0005	<0.01	0.0005 J	<0.0005	<0.0005	0.005	0.0022	0.0003 J
LF-29	13-Apr-09	<0.0005	0.0034	0.031	<0.01	<0.01	0.0055	0.0005	0.0004 J	0.0008	<0.0005	<0.01	0.0003 J	<0.0005	<0.0005	0.0033	0.0013	<0.001
LF-29	29-Apr-10	<0.0005	0.0056	0.032	<0.01	<0.01	0.006	0.0005	0.0004 J	0.0009	<0.0005	<0.01	0.0003 J	<0.0005	<0.0005	0.0035	0.0018	<0.001
LF-3	02-Jun-89	<0	<0.1	na	<0.1	<1	<0.1	<0.1	na	na	2.5	<2	<0.1	17	na	<0.1	na	12
LF-3	07-Dec-89	<0	<0.5	na	<0.5	<5	<0.5	<0.5	na	na	6.3	<10	<0.5	77	na	<0.5	na	32
LF-3	20-Jul-90	<0	<0.05	na	1.9	10	0.11	<0.05	na	na	5	7.7	<0.05	52	na	<0.05	na	22
LF-3	21-Jun-91	<0	<1	na	<2	9.9	<1	<1	na	na	7.5	8.2	<1	62	na	<1	na	44
LF-3	09-Jul-92	<0	<2.5	na	<5	<10	<2.5	<2.5	na	na	8.9	<10	<2.5	92	na	<2.5	na	43
DUP	09-Jul-92	<0	<5	na	<10	<20	<5	<5	na	na	8.8	<20	<5	100	na	<5	na	45
LF-3	09-Jun-93	<0	<2.5	na	<5	<10	<2.5	<2.5	na	na	9.8	<10	<2.5	120	na	<2.5	na	48
DUP	09-Jun-93	<0	<2.5	na	<5	<10	<2.5	<2.5	na	na	7.6	<10	<2.5	110	na	<2.5	na	37
LF-3	16-Apr-96	<0	<3	<3	<30	<50	<3	<3	<3	<3	5.5	<50	<3	45	<3	<3	<5	27
LF-3	31-Jul-96	<0	<3	<3	<30	<50	<3	<3	<3	<3	4.5	<50	<3	44	<3	<3	<5	24
LF-3	20-Nov-96	<0	<3	<3	<30	<50	<3	<3	<3	<3	4	<50	<3	41	<3	<3	<5	12
LF-3	19-Mar-97	<0	<3	<3	<30	<50	<3	<3	<3	<3	3	<50	<3	43	<3	<3	<5	16
LF-3	12-Jun-97	<0	<3	<3	<30	<50	<3	<3	<3	<3	7	<50	<3	70	<3	<3	<5	31
LF-3	19-Aug-97	<0	<5	<5	<50	<100	<5	<5	<5	<5	6	<100	<5	91	<5	<5	<10	31
LF-3	17-Dec-97	<0	<5	<5	<50	<100	<5	<5	<5	<5	<5	<100	<5	40	<5	<5	<10	<10
DUP	17-Dec-97	<0	<5	<5	<50	<100	<5	<5	<5	<5	<5	<100	<5	38	<5	<5	<10	<10
LF-3	02-Mar-98	<0	<0.5	<0.5	<10	<10	<0.5	<0.5	<0.5	<0.5	3	<10	<0.5	67.8	<0.5	<0.5	<1	15.9
LF-3	10-Apr-98	<0	<0.5	<0.5	<2.5	<2.5	<0.5	<0.5	<0.5	<0.5	0.59	<2.5	<0.5	17 J4	<0.5	<0.5	<0.5	2.9
LF-3	16-Jul-98	<2.5	<2.5	<2.5	<12	<12	<2.5	<2.5	<2.5	<2.5	3.6	<12	<2.5	52	<2.5	<2.5	<2.5	17
LF-3	19-Oct-98	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<12 UJ2	<12 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	4.6 J2	<12 UJ2	<2.5 UJ2	57 J2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2
LF-3	15-Jan-99	<0.5	<0.5	<0.5	<2.5	<2.5	<0.5	<0.5	<0.5	<0.5	2.8	<2.5	<0.5	52	<0.5	<0.5	<0.5	13.4
DUP	15-Jan-99	<0.5	<0.5	<0.5	<2.5	<2.5	<0.5	<0.5	<0.5	<0.5	2.6	<2.5	<0.5	58	<0.5	<0.5	<0.5	13.5
LF-3	22-Apr-99	<0.13	<0.13	<0.13	<0.63	<0.63	<0.13	<0.13	<0.13	0.1 J11	1	<0.63	<0.13	23	<0.13	<0.13	<0.13	4.8
LF-3	19-Jul-99	<0.2	<0.2	<0.2	<4	<4	<0.2	<0.2	<0.2	<0.2	4.1	<4	<0.2	56	<0.2	<0.2	<0.2	20
LF-3	12-Oct-99	<0.25	<0.25	<0.25	<5	<5	<0.25	<0.25	<0.25	<0.25	4.4	<5	<0.25	66	<0.25	<0.25	<0.25	22.2
LF-3	20-Jan-00	<0.1	<0.1	<0.1	<2	<2	<0.1	<0.1	<0.1	<0.1	1.4	<2	<0.1	28	<0.1	<0.1	<0.1	7.2
LF-3	01-May-00	<0.2	<0.2	<0.2	<4	<4	<0.2	<0.2	<0.2	<0.2	1.9	<4	<0.2	47	<0.2	<0.2	<0.2	9.5
LF-3	24-Jul-00	<0.17	<0.17	<0.17	<3.3	<2	<0.17	<0.17	<0.17	<0.17	4.4	<3.3	<0.17	51	<0.17	<0.17	<0.17	22
LF-3	11-Oct-00	<0.083	<0.083	<0.083	<1.7	<1.7	0.088	<0.083	<0.083	<0.083	4.5	<1.7	<0.083	59	<0.083	<0.083	<0.083	22.4
LF-3	16-Jan-01	<0.1	<0.1	<0.1	<2	<2	<0.1	<0.1	<0.1	<0.1	2.2	<2	<0.1	26	<0.1	<0.1	<0.1	8.3
LF-3	13-Apr-01	<0.1	<0.1	<0.1	<2	<2	<0.1	<0.1	<0.1	<0.1	2.2	<2	<0.1	40	<0.1	<0.1	<0.1	8.6
LF-3	06-Jul-01	<0.1	<0.1	<0.1	<2	<2	<0.1	<0.1	<0.1	<0.1	3.8	<2	<0.1	39	<0.1	<0.1	<0.1	18.2
LF-3	15-Oct-01	<0.2	<0.2	<0.2	<4	<4	<0.2	<0.2	<0.2	<0.2	3.8	<4	<0.2	41	<0.2	<0.2	<0.2	18.5
LF-3	10-Jan-02	<0.005	<0.005	<0.005	<0.1	<0.1	0.019	<0.005	<0.005	0.0067	0.35	<0.1	<0.005	1.7	<0.005	<0.005	<0.005	1.8
LF-3	03-Apr-02	na	na	na	na	na	<0.001	na	na	na	0.829	na	na	0.421	na	na	na	3.9343

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-29	16-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0049	<0.0005	<0.0005	<0.01	0.0003 J	<0.0005	<0.001	<0.001	<0.001	0.0006	<0.0005
LF-29	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0035	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0004 J	<0.0005
LF-29	13-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0033	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0003 J	<0.0005
LF-29	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.003	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0003 J	<0.0005
LF-3	02-Jun-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-3	07-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-3	20-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-3	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-3	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-3	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-3	16-Apr-96	<3	<3	<0.1	<3	<3	na	na	na	<30	na	<5	<5	<5	na	na	na
LF-3	31-Jul-96	<3	<3	na	<3	<3	na	na	na	<30	na	<5	<5	<5	na	na	na
LF-3	20-Nov-96	<3	<3	na	<3	<3	na	na	na	<30	na	<5	<5	<5	na	na	na
LF-3	19-Mar-97	<3	<3	na	<3	<3	na	na	na	<30	na	<5	<5	<5	na	na	na
LF-3	12-Jun-97	<3	<3	na	<3	<3	na	na	na	<30	na	<5	<5	<5	na	na	na
LF-3	19-Aug-97	<5	<5	na	<5	<5	na	na	na	<50	na	<10	<10	<10	na	na	na
LF-3	17-Dec-97	<5	<5	na	<5	<5	na	na	na	<50	na	<10	<10	<10	na	na	na
DUP	17-Dec-97	<5	<5	na	<5	<5	na	na	na	<50	na	<10	<10	<10	na	na	na
LF-3	02-Mar-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<0.5	<0.5
LF-3	10-Apr-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LF-3	16-Jul-98	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<12	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
LF-3	19-Oct-98	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<12 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2
LF-3	15-Jan-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
DUP	15-Jan-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LF-3	22-Apr-99	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.63	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
LF-3	19-Jul-99	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4	<0.2	<0.2	<0.4	<0.4	<0.4	<0.2	<0.2
LF-3	12-Oct-99	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<5	<0.25	<0.25	<0.5	<0.5	<0.5	<0.25	<0.25
LF-3	20-Jan-00	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.1
LF-3	01-May-00	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4	<0.2	<0.2	<0.4	<0.4	<0.4	<0.2	<0.2
LF-3	24-Jul-00	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<3.3	<0.17	<0.17	<0.33	<0.33	<0.33	<0.17	<0.17
LF-3	11-Oct-00	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<1.7	<0.083	<0.083	<0.17	<0.17	<0.17	<0.083	<0.083
LF-3	16-Jan-01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.1
LF-3	13-Apr-01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.1
LF-3	06-Jul-01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.1
LF-3	15-Oct-01	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4	<0.2	<0.2	<0.4	<0.4	<0.4	<0.2	<0.2
LF-3	10-Jan-02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.01	<0.01	<0.01	<0.005	<0.005
LF-3	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-29	16-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0084	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
LF-29	15-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0056	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-29	13-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0052	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-29	29-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0052	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-3	02-Jun-89	na	na	0.091	na	na	na	na	na	na	na	na
LF-3	07-Dec-89	na	na	0.14	na	na	na	na	na	na	na	na
LF-3	20-Jul-90	na	na	0.16	na	na	na	na	na	na	na	na
LF-3	21-Jun-91	na	na	0.11	na	na	na	na	na	na	na	na
LF-3	09-Jul-92	na	na	0.15	na	na	na	na	na	na	na	na
DUP	09-Jul-92	na	na	0.14	na	na	na	na	na	na	na	na
LF-3	09-Jun-93	na	na	0.17	na	na	na	na	na	na	na	na
DUP	09-Jun-93	na	na	0.16	na	na	na	na	na	na	na	na
LF-3	16-Apr-96	na	na	<0.1	<3	na	na	<30	<0.1	na	na	<3
LF-3	31-Jul-96	na	na	na	<3	na	na	<30	na	na	na	<3
LF-3	20-Nov-96	na	na	na	<3	na	na	<30	na	na	na	<3
LF-3	19-Mar-97	na	na	na	<3	na	na	<30	na	na	na	<3
LF-3	12-Jun-97	na	na	na	<3	na	na	<30	na	na	na	<3
LF-3	19-Aug-97	na	na	na	<5	na	na	<50	na	na	na	<5
LF-3	17-Dec-97	na	na	na	<5	na	na	<50	na	na	na	<5
DUP	17-Dec-97	na	na	na	<5	na	na	<50	na	na	na	<5
LF-3	02-Mar-98	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5
LF-3	10-Apr-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	na	<0.5	<1	<0.5	<0.5
LF-3	16-Jul-98	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	na	<2.5	<5	<2.5	<2.5
LF-3	19-Oct-98	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	<2.5 UJ2	na	<2.5 UJ2	<5 UJ2	<2.5 UJ2	<2.5 UJ2
LF-3	15-Jan-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	na	<0.5	<1	<0.5	<0.5
DUP	15-Jan-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	na	<0.5	<1	<0.5	<0.5
LF-3	22-Apr-99	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	na	<0.13	<0.25	<0.13	<0.13
LF-3	19-Jul-99	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4	<0.2	<0.2	<0.2	<0.2
LF-3	12-Oct-99	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<5	<0.25	<0.25	<0.25	<0.25
LF-3	20-Jan-00	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.1	<0.1
LF-3	01-May-00	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<4	<0.2	<0.2	<0.2	<0.2
LF-3	24-Jul-00	<0.17	<0.17	<0.33	<0.17	<0.17	<0.17	<3.3	<0.17	<0.17	<0.17	<0.17
LF-3	11-Oct-00	<0.083	<0.083	<0.17	<0.083	<0.083	<0.083	<1.7	<0.083	<0.083	<0.083	<0.083
LF-3	16-Jan-01	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.1	<0.1
LF-3	13-Apr-01	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.1	<0.1
LF-3	06-Jul-01	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.1	<0.1
LF-3	15-Oct-01	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<4	<0.2	<0.2	<0.2	<0.2
LF-3	10-Jan-02	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005
LF-3	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-3	10-Apr-02	<0.036	<0.036	<0.036	<0.71	<0.71	0.046	<0.036	<0.036	<0.036	1.4	<0.71	<0.036	8.4	<0.036	<0.036	<0.036	6.47
LF-3	09-Jul-02	<0.1	<0.1	<0.1	<2	<2	<0.1	<0.1	<0.1	<0.1	<1.9	<2	<0.1	23	<0.1	<0.1	<0.1	1.8
LF-3	10-Oct-02	<0.083	<0.083	<0.083	<1.7	<1.7	0.053 J	<0.083	<0.083	<0.083	2.3	<1.7	<0.083	24	<0.083	<0.083	<0.083	9.3
LF-3	20-Jan-03	<0.042	<0.042	<0.042	<0.83	<0.83	<0.042	<0.042	<0.042	<0.042	0.69 J	<0.83	<0.042	9.8 J	<0.042	<0.042	<0.042	3.44 JJ
LF-3	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.001	<0.0005	<0.0005	0.0009	0.018	<0.01	<0.0005	0.066	<0.0005	<0.0005	<0.0005	0.07
LF-3	10-Jul-03	<0.036	<0.036	<0.036	<0.71	<0.71	<0.036	<0.036	<0.036	<0.036	0.78	<0.71	<0.036	11	<0.036	<0.036	<0.036	3.81
LF-3	28-Oct-03	<0.042	<0.042	<0.042	<0.83	<0.83	<0.042	<0.042	<0.042	<0.042	1.9	<0.83	<0.042	12	<0.042	<0.042	<0.042	9.5
DUP	28-Oct-03	<0.036	<0.036	<0.036	<0.71	<0.71	<0.036	<0.036	<0.036	<0.036	1.5	<0.71	<0.036	10	<0.036	<0.036	<0.036	7.7
LF-3	22-Jan-04	<0.036	<0.036	<0.036	<0.71	<0.71	0.038 J	<0.036	<0.036	<0.036	1.4 J	<0.71	<0.036	11 J	<0.036	<0.036	<0.036	6.27 JJ
LF-3	05-May-04	<0.0083	<0.0083	<0.0083	<0.17	<0.17	0.027	<0.0083	<0.0083	0.011	0.78	<0.17	<0.0083	6.5	<0.0083	<0.0083	<0.0083	3.51
LF-3	15-Jul-04	<0.02	<0.02	<0.02	<0.4	<0.4	0.035	<0.02	<0.02	<0.02	1.7	<0.4	<0.02	8.8	<0.02	<0.02	<0.02	8.6
LF-3	11-Oct-04	<0.036	<0.036	<0.036	<0.71	<0.71	0.037	<0.036	<0.036	<0.036	1.7	<0.71	<0.036	6.3	<0.036	<0.036	<0.036	9
LF-3	20-Jan-05	<0.025	<0.025	<0.025	<0.5	<0.5	0.026	<0.025	<0.025	0.018 J	0.3	<0.5	<0.025	3.9	<0.025	<0.025	<0.025	1.65
LF-3	20-Apr-05	<0.083	<0.083	<0.083	<1.7	<1.7	<0.083	<0.083	<0.083	<0.083	0.85	<1.7	<0.083	9.7	<0.083	<0.083	<0.083	4.27
LF-3	21-Jul-05	<0.031	<0.031	<0.031	<0.63	<0.63	0.029 J	<0.031	0.055	<0.031	0.68	<0.63	<0.031	4.5	<0.031	<0.031	<0.031	4.02
LF-3	26-Oct-05	<0.017	<0.017	<0.017	<0.33	<0.33	0.027	<0.017	<0.017	0.024	1.6	<0.33	<0.017	2	<0.017	<0.017	<0.017	7.6
LF-3	24-Jan-06	<0.063	<0.063	<0.063	<1.3	<1.3	0.036 J	<0.063	<0.063	<0.063	0.54	<1.3	<0.063	8.6	<0.063	<0.063	<0.063	2.88
LF-3	19-Apr-06	<0.05	<0.05	<0.05	<1	<1	0.031 J	<0.05	<0.05	<0.05	0.61	<1	<0.05	5.1	<0.05	<0.05	<0.05	3.41
LF-3	18-Apr-07	<0.02	<0.02	<0.02	<0.4	<0.4	0.045	<0.02	<0.02	<0.02	1	<0.4	<0.02	0.46	<0.02	<0.02	<0.02	6.34
LF-3	15-Apr-08	<0.02	<0.02	<0.02	<0.4	<0.4	0.039	<0.02	<0.02	0.012 J	1.2	<0.4	<0.02	0.65	<0.02	<0.02	<0.02	6.18
LF-3	15-Apr-09	<0.01	<0.01	<0.01	<0.2	<0.2	0.051	<0.01	<0.01	0.012	1.7	<0.2	<0.01	0.42	<0.01	<0.01	<0.01	8
LF-3	26-Apr-10	<0.017	<0.017	<0.017	<0.33	<0.33	0.048	<0.017	<0.017	0.014 J	1.2	<0.33	<0.017	3.5	<0.017	<0.017	<0.017	6.88
LF-30	30-Dec-97	<0	0.02	0.099	<0.05	<0.1	<0.005	<0.005	<0.005	0.01	<0.005	<0.1	<0.005	<0.005	<0.005	0.023	<0.01	<0.01
LF-30	25-Feb-98	<0	0.0016	0.019	<0.02	<0.02	<0.001	<0.001	<0.001	0.0015	<0.001	<0.02	<0.001	<0.001	<0.001	0.0092	<0.002	<0.002
DUP	25-Feb-98	<0	0.0026	0.023	<0.02	<0.02	<0.001	<0.001	<0.001	0.0017	<0.001	<0.02	<0.001	<0.001	<0.001	0.01	<0.002	<0.002
LF-30	07-Apr-98	<0	0.0076	0.037	<0.005	<0.005	<0.001	<0.001	<0.001	0.0051	<0.001	<0.005	<0.001	<0.001	<0.001	0.012	0.0021	<0.001
LF-30	14-Jul-98	<0.002	0.0055	0.034	<0.01	<0.01	<0.002	<0.002	<0.002	0.005	<0.002	<0.01	<0.002	<0.002	<0.002	0.011	<0.002	<0.002
LF-30	20-Oct-98	<0.001	0.005	0.034	<0.005	<0.005	<0.001	<0.001	<0.001	0.0035	<0.001	<0.005	<0.001	<0.001	<0.001	0.0097	0.0015	<0.001
LF-30	11-Jan-99	<0.001	0.0095	0.053	<0.005	<0.005	0.001 J11	<0.001	<0.001	0.0056	<0.001	<0.005	<0.001	0.004	<0.001	0.015	0.0034	<0.001
LF-30	20-Apr-99	<0.001	0.0033	0.021	<0.005	<0.005	<0.001	<0.001	<0.001	0.003	<0.001	<0.005	<0.001	<0.001	<0.001	0.0092	0.0011	<0.001
LF-30	13-Jul-99	<0.0005	0.0094	0.048	<0.01	<0.01	0.0011	<0.0005	<0.0005	0.006	<0.0005	<0.01	<0.0005	0.0051	<0.0005	0.018	0.0023	<0.001
LF-30	11-Oct-99	<0.0005	0.003	0.025	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0029	<0.0005	<0.01	<0.0005	0.002	<0.0005	0.013	0.0009	<0.001
LF-30	18-Jan-00	<0.0005	0.0047	0.038	<0.01	<0.01	0.0006	<0.0005	<0.0005	0.0044	<0.0005	<0.01	<0.0005	0.0035	<0.0005	0.015	0.0014	<0.001
LF-30	24-Jan-01	<0.0005	0.013	0.065	<0.01	<0.01	0.0014	0.0008	<0.0005	0.0082	<0.0005	<0.01	<0.0005	<0.0005	0.0005	0.023	0.0035	<0.001
LF-30	09-Jan-02	<0.0005	0.0054	0.025	<0.01	<0.01	0.0006	<0.0005	<0.0005	0.0045	<0.0005	0.019	<0.0005	<0.0005	<0.0005	0.0093	0.0016	<0.001
LF-30	10-Apr-02	<0.0005	0.012	0.065	<0.01	<0.01	0.0019	0.0008	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0007	0.025	0.0036	<0.001
LF-30	17-Jan-03	<0.0005	0.0093 J	0.051 J	<0.01	<0.01	0.0012 J	<0.0005	<0.0005	0.0076 J	<0.0005	<0.01	<0.0005	<0.0005	0.0006 J	0.021 J	0.0024 J	<0.001
LF-30	20-Jan-04	<0.0005	0.004	0.028	<0.01	<0.01	0.0014	0.0005	<0.0005	0.0055	<0.0005	<0.01	<0.0005	<0.0005	0.0008	0.019	0.0012	<0.001
LF-30	18-Jan-05	<0.0005	0.0029	0.027	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0028	<0.0005	<0.01	<0.0005	<0.0005	0.0006	0.015	0.0004 J	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-pentanone	Bromobenzene	Carbon Disulfide	Chloroethane	Chloromethane	Dichlorodifluoromethane	Isopropylbenzene	n-Butylbenzene
LF-3	10-Apr-02	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.71	<0.036	<0.036	<0.071	<0.071	<0.071	<0.036	<0.036
LF-3	09-Jul-02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.1
LF-3	10-Oct-02	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<1.7	<0.083	<0.083	<0.17	<0.17	<0.17	<0.083	<0.083
LF-3	20-Jan-03	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.83	<0.042	<0.042	<0.083	<0.083	<0.083	<0.042	<0.042
LF-3	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	0.0018	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-3	10-Jul-03	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.71	<0.036	<0.036	<0.071	<0.071	<0.071	<0.036	<0.036
LF-3	28-Oct-03	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.83	<0.042	<0.042	<0.083	<0.083	<0.083	<0.042	<0.042
DUP	28-Oct-03	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.71	<0.036	<0.036	<0.071	<0.071	<0.071	<0.036	<0.036
LF-3	22-Jan-04	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.71	<0.036	<0.036	<0.071	<0.071	<0.071	<0.036	<0.036
LF-3	05-May-04	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.17	<0.0083	<0.0083	<0.017	<0.017	<0.017	<0.0083	<0.0083
LF-3	15-Jul-04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.4	<0.02	<0.02	<0.04	<0.04	<0.04	<0.02	<0.02
LF-3	11-Oct-04	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.71	<0.036	<0.036	<0.071	<0.071	<0.071	<0.036	<0.036
LF-3	20-Jan-05	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.5	<0.025	<0.025	<0.05	<0.05	<0.05	<0.025	<0.025
LF-3	20-Apr-05	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<1.7	<0.083	<0.083	<0.17	<0.17	<0.17	<0.083	<0.083
LF-3	21-Jul-05	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.63	<0.031	<0.031	<0.063	<0.063	<0.063	<0.031	<0.031
LF-3	26-Oct-05	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	0.0091 J	0.0092 J	<0.33	<0.017	<0.017	<0.033	<0.033	<0.033	<0.017	<0.017
LF-3	24-Jan-06	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	<1.3	<0.063	<0.063	<0.13	<0.13	<0.13	<0.063	<0.063
LF-3	19-Apr-06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.1	<0.1	<0.05	<0.05
LF-3	18-Apr-07	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.012 J	0.016 J	<0.4	<0.02	<0.02	<0.04	<0.04	<0.04	<0.02	<0.02
LF-3	15-Apr-08	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.013 J	<0.4	<0.02	<0.02	<0.04	<0.04	<0.04	<0.02	<0.02
LF-3	15-Apr-09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.018	0.015	<0.2	<0.01	<0.01	<0.02	<0.02	<0.02	0.011	<0.01
LF-3	26-Apr-10	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.33	<0.017	<0.017	<0.033	<0.033	<0.033	<0.017	<0.017
LF-30	30-Dec-97	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-30	25-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
DUP	25-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-30	07-Apr-98	0.0013	<0.001	<0.001	<0.001	<0.001	0.0025	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	0.0041	<0.001	<0.001
LF-30	14-Jul-98	<0.002	<0.002	<0.002	<0.002	<0.002	0.0022	<0.002	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
LF-30	20-Oct-98	0.001	<0.001	<0.001	<0.001	<0.001	0.0017	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	0.0038	<0.001	<0.001
LF-30	11-Jan-99	0.0014	<0.001	<0.001	<0.001	<0.001	0.0033	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	0.0054	<0.001	<0.001
LF-30	20-Apr-99	0.0008 J11	<0.001	<0.001	<0.001	<0.001	0.0018	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-30	13-Jul-99	0.0014	<0.0005	<0.0005	<0.0005	<0.0005	0.0033	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-30	11-Oct-99	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	0.0034	<0.0005	<0.0005
LF-30	18-Jan-00	0.0012	<0.0005	<0.0005	<0.0005	<0.0005	0.0029	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	0.002	<0.0005	<0.0005
LF-30	24-Jan-01	0.0018	<0.0005	<0.0005	<0.0005	<0.0005	0.004	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	0.0029	<0.0005	<0.0005
LF-30	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-30	10-Apr-02	0.0017	<0.0005	<0.0005	<0.0005	<0.0005	0.0046	<0.0005	<0.0005	<0.01	0.0007	<0.0005	<0.001	<0.001	0.0034	<0.0005	<0.0005
LF-30	17-Jan-03	0.0013 J	<0.0005	<0.0005	<0.0005	<0.0005	0.005 J	<0.0005	<0.0005	<0.01	0.0009 J	<0.0005	<0.001	<0.001	0.0029 J	<0.0005	<0.0005
LF-30	20-Jan-04	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	0.0034	<0.0005	<0.0005	<0.01	0.0011	<0.0005	<0.001	<0.001	0.0023	<0.0005	<0.0005
LF-30	18-Jan-05	0.001	<0.0005	<0.0005	<0.0005	<0.0005	0.0032	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	0.0023	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-3	10-Apr-02	<0.036	<0.036	<0.14	<0.036	<0.036	<0.036	<0.71	<0.036	<0.036	<0.036	<0.036
LF-3	09-Jul-02	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.1	<0.1
LF-3	10-Oct-02	<0.083	<0.083	<0.33	<0.083	<0.083	<0.083	<1.7	<0.083	<0.083	<0.083	<0.083
LF-3	20-Jan-03	<0.042	<0.042	<0.17	<0.042	<0.042	<0.042	<0.83	<0.042	<0.042	<0.042	<0.042
LF-3	16-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-3	10-Jul-03	<0.036	<0.036	<0.14	<0.036	<0.036	<0.036	<0.71	<0.036	<0.036	<0.036	<0.036
LF-3	28-Oct-03	<0.042	<0.042	<0.17	<0.042	<0.042	<0.042	<0.83	<0.042	<0.042	<0.042	<0.042
DUP	28-Oct-03	<0.036	<0.036	<0.14	<0.036	<0.036	<0.036	<0.71	<0.036	<0.036	<0.036	<0.036
LF-3	22-Jan-04	<0.036	<0.036	<0.14	<0.036	<0.036	<0.036	<0.71	<0.036	<0.036	<0.036	<0.036
LF-3	05-May-04	<0.0083	<0.0083	<0.033	<0.0083	<0.0083	<0.0083	<0.17	<0.0083	<0.0083	<0.0083	<0.0083
LF-3	15-Jul-04	<0.02	<0.02	<0.08	<0.02	<0.02	<0.02	<0.4	<0.02	<0.02	<0.02	<0.02
LF-3	11-Oct-04	<0.036	<0.036	<0.14	<0.036	<0.036	<0.036	<0.71	<0.036	<0.036	<0.036	<0.036
LF-3	20-Jan-05	<0.025	<0.025	<0.1	<0.025	<0.025	<0.025	<0.5	<0.025	<0.025	<0.025	<0.025
LF-3	20-Apr-05	<0.083	<0.083	<0.33	<0.083	<0.083	<0.083	<1.7	<0.083	<0.083	<0.083	<0.083
LF-3	21-Jul-05	<0.031	<0.031	<0.13	<0.031	<0.031	<0.031	<0.63	<0.031	<0.031	<0.031	<0.031
LF-3	26-Oct-05	<0.017	<0.017	0.051 J	<0.017	<0.017	<0.017	<0.33	<0.017	<0.017	<0.017	<0.017
LF-3	24-Jan-06	<0.063	<0.063	<0.25	<0.063	<0.063	<0.063	<1.3	<0.063	<0.063	<0.063	<0.063
LF-3	19-Apr-06	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.05	<0.05
LF-3	18-Apr-07	<0.02	<0.02	<0.08	<0.02	<0.02	<0.02	<0.4	<0.02	<0.02	<0.02	<0.02
LF-3	15-Apr-08	<0.02	<0.02	<0.08	<0.02	<0.02	<0.02	<0.4	<0.02	<0.02	<0.02	<0.02
LF-3	15-Apr-09	<0.01	0.0067 J	0.048	<0.01	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01
LF-3	26-Apr-10	<0.017	<0.017	<0.067	<0.017	<0.017	<0.017	<0.33	<0.017	<0.017	<0.017	<0.017
LF-30	30-Dec-97	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-30	25-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
DUP	25-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-30	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011	na	<0.001	<0.002	<0.001	<0.001
LF-30	14-Jul-98	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	na	<0.002	<0.002	<0.002	<0.002
LF-30	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-30	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0015	na	<0.001	0.0014 J11	<0.001	<0.001
LF-30	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0008 J11	na	<0.001	<0.002	<0.001	<0.001
LF-30	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0016	<0.01	<0.0005	0.0016	<0.0005	<0.0005
LF-30	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-30	18-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.001	<0.01	<0.0005	0.0011	<0.0005	<0.0005
LF-30	24-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0026	<0.01	<0.0005	0.0014	<0.0005	<0.0005
LF-30	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0009	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-30	10-Apr-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0027	<0.01	<0.0005	0.0017	<0.0005	<0.0005
LF-30	17-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0024 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-30	20-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0016	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-30	18-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-30	26-Jan-06	<0.0005	0.0037	0.028	<0.01	<0.01	0.0008	0.0005 J	<0.0005	0.0049	<0.0005	<0.01	<0.0005	<0.0005	0.0009	0.019	0.001	<0.001
LF-31	02-Jun-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.0005	<0.001	<0.001	0.0058	<0.001	<0.005	<0.001	<0.001	0.0022	<0.001	0.0006	<0.002
LF-31	13-Jul-99	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0054	<0.0005	<0.01	<0.0005	<0.0005	0.0024	0.0006	0.0006	<0.001
LF-31	11-Oct-99	<0.0005	0.003	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.019	<0.0005	<0.01	<0.0005	<0.0005	0.0094	0.0034	0.0015	<0.001
LF-32	22-Jun-99	<0.0005	0.0098	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	0.0009	<0.0005	<0.0005	0.0069	<0.0005	<0.001
LF-32	16-Jul-99	<0.0005	0.0091	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	0.001	<0.0005	<0.0005	0.0067	<0.0005	<0.001
LF-32	25-Oct-99	<0.0005	0.013	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0021	<0.0005	<0.01	0.0012	<0.0005	<0.0005	0.0079	<0.0005	<0.001
DUP	25-Oct-99	<0.0005	0.013	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.002	<0.0005	<0.01	0.0012	<0.0005	<0.0005	0.0076	<0.0005	<0.001
LF-33	22-Jun-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0005	<0.0013	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	22-Jun-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0005	<0.0009	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-33	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0005	0.0006	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-33	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-34	22-Jun-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.014	<0.0005	<0.01	<0.0005	<0.0005	0.0056	0.0005	<0.0005	<0.001
LF-34	13-Jul-99	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	<0.0005	<0.0005	0.0059	0.0008	<0.0005	<0.001
LF-34	11-Oct-99	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.018	<0.0005	<0.01	<0.0005	<0.0005	0.006	0.0008	0.0015	<0.001
LF-35	25-Oct-99	<0.0005	0.002	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	14-Jan-00	<0.0005	0.0024	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	28-Apr-00	<0.0005	0.0023	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	25-Jul-00	<0.0005	0.0089	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	25-Jul-00	<0.0005	0.0086	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	10-Oct-00	<0.0005	0.0038	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	17-Jan-01	<0.0005	0.006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	13-Apr-01	<0.0005	0.0034	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	05-Jul-01	<0.0005	0.0044	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	15-Oct-01	<0.0005	0.038	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0044	<0.0005	<0.01	<0.0005	<0.0005	0.0011	0.0009	<0.0005	<0.001
LF-35	08-Jan-02	<0.0005	0.026	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0028	<0.0005	<0.01	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.001
DUP	08-Jan-02	<0.0005	0.024	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0029	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.001
LF-35	08-Apr-02	<0.0005	0.014	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0022	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	08-Apr-02	<0.0005	0.014	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0021	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	08-Jul-02	<0.0005	0.0084	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	07-Oct-02	<0.0005	0.0071	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.001
LF-35	15-Jan-03	<0.0005	0.0057	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	15-Apr-03	<0.0005	0.0046	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	09-Jul-03	<0.0005	0.004	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	27-Oct-03	<0.0005	0.0038	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	19-Jan-04	<0.0005	0.0037	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	04-May-04	<0.0005	0.0027	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	14-Jul-04	<0.0005	0.0031	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	13-Oct-04	<0.0005	0.0034	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-30	26-Jan-06	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	0.004	<0.0005	<0.0005	<0.01	0.0008	<0.0005	<0.001	<0.001	0.0022	<0.0005	<0.0005
LF-31	02-Jun-99	<0.0005	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-31	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-31	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-32	22-Jun-99	<0.0005	<0.0005	<0.0095	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-32	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-32	25-Oct-99	<0.0005	0.0018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	25-Oct-99	<0.0005	0.0018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-33	22-Jun-99	<0.0005	<0.0005	<0.0094	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	22-Jun-99	<0.0005	<0.0005	<0.0095	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-33	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-33	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-34	22-Jun-99	<0.0005	<0.0005	<0.0095	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-34	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-34	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	14-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	13-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	05-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	07-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	04-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-30	26-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0013	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-31	02-Jun-99	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	na	<0.01	0.0076	<0.001	<0.001
LF-31	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0081	<0.0005	<0.0005
LF-31	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0064	<0.0005	<0.0005
LF-32	22-Jun-99	<0.0005	<0.0005	<0.0095	<0.0005	<0.0005	<0.0005	<0.01	<0.0095	0.0019	<0.0005	<0.0005
LF-32	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0019	<0.0005	<0.0005
LF-32	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
DUP	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0017	<0.0005	<0.0005
LF-33	22-Jun-99	<0.0005	<0.0005	<0.0094	<0.0005	<0.0005	<0.0005	<0.01	<0.0094	0.0006	<0.0005	<0.0005
DUP	22-Jun-99	<0.0005	<0.0005	<0.0095	<0.0005	<0.0005	<0.0005	<0.01	<0.0095	0.0006	<0.0005	<0.0005
LF-33	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-33	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-34	22-Jun-99	<0.0005	<0.0005	<0.0095	<0.0005	<0.0005	<0.0005	<0.01	<0.0095	0.0026	<0.0005	<0.0005
LF-34	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0023	<0.0005	<0.0005
LF-34	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0015	<0.0005	<0.0005
LF-35	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.003	<0.0005	<0.0005
LF-35	14-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0025	<0.0005	<0.0005
LF-35	28-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0026	<0.0005	<0.0005
LF-35	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.009	<0.0005	<0.0005
DUP	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.01	<0.0005	<0.0005
LF-35	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0033	<0.0005	<0.0005
LF-35	17-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	0.035	<0.0005	0.0058	<0.0005	<0.0005
LF-35	13-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0034	<0.0005	<0.0005
LF-35	05-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0045	<0.0005	<0.0005
LF-35	15-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.012	<0.0005	<0.0005
LF-35	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0089	<0.0005	<0.0005
DUP	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.009	<0.0005	<0.0005
LF-35	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.006	<0.0005	<0.0005
DUP	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0059	<0.0005	<0.0005
LF-35	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.004	<0.0005	<0.0005
LF-35	07-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0017	<0.0005	<0.0005
LF-35	15-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0028	<0.0005	<0.0005
LF-35	15-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0022	<0.0005	<0.0005
LF-35	09-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0019	<0.0005	<0.0005
LF-35	27-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0017	<0.0005	<0.0005
LF-35	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0019	<0.0005	<0.0005
LF-35	04-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0017	<0.0005	<0.0005
LF-35	14-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.002	<0.0005	<0.0005
LF-35	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0015	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-35	17-Jan-05	<0.0005	0.0034	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	18-Apr-05	<0.0005	0.0032	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	18-Apr-05	<0.0005	0.0032	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	18-Jul-05	<0.0005	0.0031	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	24-Oct-05	<0.0005	0.0021	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	23-Jan-06	<0.0005	0.0032	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	17-Apr-06	<0.0005	0.0039	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-35	18-Apr-07	<0.0005	0.0033	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.001
LF-35	17-Apr-08	<0.0005	0.0044	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0017	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.001
LF-35	14-Apr-09	<0.0005	0.0046	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0017	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.001
LF-35	30-Apr-10	<0.0005	0.0049	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0017	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.001
LF-35	17-Apr-12	<0.0005	0.0023	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.002	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.001
LF-35	22-Apr-13	<0.0005	0.0037	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.001
LF-35	28-Apr-14	<0.0005	0.0034	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.001
LF-36	13-Jan-00	<0.001	<0.001	<0.001	<0.02	0.29	<0.001	<0.001	<0.001	0.014	<0.001	<0.02	<0.001	<0.001 UJ	0.0047	<0.001 UJ	0.001	<0.002
LF-36	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0045	<0.0005	0.001	<0.001
LF-36	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.018	<0.0005	<0.01	<0.0005	<0.0005	0.0055	<0.0005	0.001	<0.001
LF-36	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.019	<0.0005	<0.01	<0.0005	<0.0005	0.0059	<0.0005	0.0017	<0.001
LF-36	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0041	<0.0005	0.001	<0.001
LF-36	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.014	<0.0005	<0.01	<0.0005	<0.0005	0.0038	<0.0005	0.0013	<0.001
LF-36	02-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0033	<0.0005	<0.0005	<0.001
LF-36	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	<0.0005	<0.0005	0.0042	<0.0005	0.0013	<0.001
LF-36	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0033	<0.0005	0.0009	<0.001
LF-36	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.01	<0.0005	<0.01	<0.0005	<0.0005	0.0028	<0.0005	0.0008	<0.001
LF-36	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0037	<0.0005	0.001	<0.001
LF-36	09-Oct-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0034	0.0005	0.0007	<0.001
LF-36	14-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0095	<0.0005	<0.01	<0.0005	<0.0005	0.0028	<0.0005	0.0006	<0.001
LF-36	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0029	<0.0005	0.0006	<0.001
LF-36	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0034	<0.0005	0.0009	<0.001
LF-36	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0099	<0.0005	<0.01	<0.0005	<0.0005	0.003	<0.0005	0.0007	<0.001
LF-36	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0089	<0.0005	<0.01	<0.0005	<0.0005	0.0024	<0.0005	0.0007	<0.001
LF-36	03-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0078	<0.0005	<0.01	<0.0005	<0.0005	0.0022	<0.0005	<0.0005	<0.001
LF-36	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0076	<0.0005	<0.01	<0.0005	<0.0005	0.0019	<0.0005	<0.0005	<0.001
DUP	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0082	<0.0005	<0.01	<0.0005	<0.0005	0.0022	<0.0005	<0.0005	<0.001
LF-36	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.009	<0.0005	<0.01	<0.0005	<0.0005	0.0022	0.0005	0.0006	<0.001
LF-36	17-Jan-05	<0.0005	0.0041	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0062	<0.0005	<0.01	<0.0005	<0.0005	0.001	0.0026	<0.0005	<0.001
LF-36	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0071	<0.0005	<0.01	<0.0005	<0.0005	0.0021	0.0003 J	<0.0005	<0.001
LF-36	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0071	<0.0005	<0.01	<0.0005	<0.0005	0.0021	0.0004 J	0.0004 J	<0.001
LF-36	27-Oct-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0099	<0.0005	<0.01	<0.0005	<0.0005	0.0029	0.0005 J	0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-35	17-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	18-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	18-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	18-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	17-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	17-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	30-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-35	28-Apr-14	0.0001 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	13-Jan-00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-36	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0023	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	02-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0038	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0015	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	09-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	14-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	03-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	17-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	27-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-35	17-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0019	<0.0005	<0.0005
LF-35	18-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
DUP	18-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
LF-35	18-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.002	<0.0005	<0.0005
LF-35	24-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.002	<0.0005	<0.0005
LF-35	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0018	<0.0005	<0.0005
LF-35	17-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.002	<0.0005	<0.0005
LF-35	18-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
LF-35	17-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0017	<0.0005	<0.0005
LF-35	14-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0015	<0.0005	<0.0005
LF-35	30-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
LF-35	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
LF-35	22-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
LF-35	28-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-36	13-Jan-00	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.02	<0.001	0.0017	<0.001	<0.001
LF-36	28-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-36	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-36	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-36	17-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-36	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	02-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-36	12-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-36	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-36	09-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	09-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
LF-36	14-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	15-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-36	08-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	27-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	03-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	12-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	12-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	14-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	17-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-36	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-36	19-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-36	27-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexanone	Acetone	Benzene	Chlorobenzene	Chloroform	cis-1,2-DCE	Ethylbenzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-36	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0086	<0.0005	<0.01	<0.0005	<0.0005	0.0027	0.0003 J	<0.0005	<0.001
LF-36	18-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0044	<0.0005	<0.01	<0.0005	<0.0005	0.0016	0.0004 J	<0.0005	<0.001
LF-36	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	0.0007	0.0003 J	<0.0005	<0.001
LF-36	17-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
DUP	17-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.001
LF-36	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
LF-36	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-36	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-36	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-36	12-Oct-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
DUP	12-Oct-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
LF-36	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
LF-36	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-36	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0002 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0001 J	<0.0005	<0.001
LF-36	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	0.0002 J	0.0001 J	<0.0005	<0.001
LF-37	14-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	14-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	25-Jul-00	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	10-Oct-00	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	17-Jan-01	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	05-Jul-01	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	08-Apr-02	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	08-Jul-02	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	10-Oct-02	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	10-Oct-02	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	27-Oct-03	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	27-Oct-03	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	19-Jan-04	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	03-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-36	27-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	18-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	17-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	17-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	12-Oct-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	12-Oct-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-36	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	14-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	14-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	05-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	10-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	10-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	03-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-36	27-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-36	18-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	17-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	17-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	14-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	28-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	15-Apr-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	21-Jul-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	12-Oct-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	12-Oct-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	23-Feb-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	22-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-36	29-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-37	14-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
DUP	14-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
LF-37	28-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
DUP	28-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-37	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-37	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-37	17-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-37	10-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-37	05-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-37	12-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-37	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-37	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-37	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
DUP	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-37	10-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
DUP	10-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-37	15-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-37	15-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
LF-37	08-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
DUP	08-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-37	27-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
DUP	27-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-37	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-37	03-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-37	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0017	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0017	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	18-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	18-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0022	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	24-Oct-05	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0025	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	23-Jan-06	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	18-Apr-06	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0021	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
LF-37	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0021	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	30-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	17-Apr-12	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	22-Apr-13	<0.0005	0.0001 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0002 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	22-Apr-13	<0.0005	0.0002 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0002 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-37	23-Apr-14	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	14-Jan-00	<0.0005	0.0015	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	28-Apr-00	<0.0005	0.0011	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	25-Jul-00	<0.0005	0.0017	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	10-Oct-00	<0.0005	0.0017	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	10-Oct-00	<0.0005	0.0018	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	17-Jan-01	<0.0005	0.0019	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	17-Jan-01	<0.0005	0.0019	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	10-Apr-01	<0.0005	0.0012	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	05-Jul-01	<0.0005	0.0019	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	12-Oct-01	<0.0005	0.0018	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	08-Jan-02	<0.0005	0.0024	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	08-Apr-02	<0.0005	0.002	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	08-Jul-02	<0.0005	0.0019	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	10-Oct-02	<0.0005	0.0019	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	15-Jan-03	<0.0005	0.0023	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	15-Jan-03	<0.0005	0.0019	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	15-Apr-03	<0.0005	0.0025	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	08-Jul-03	<0.0005	0.0022	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	27-Oct-03	<0.0005	0.0024	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	19-Jan-04	<0.0005	0.0027	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	03-May-04	<0.0005	0.0027	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	12-Jul-04	<0.0005	0.0033	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	13-Oct-04	<0.0005	0.0028	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-37	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	18-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	18-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	18-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	30-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-37	23-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	14-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	05-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	10-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	03-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-37	12-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-37	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-37	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-37	18-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
LF-37	18-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
LF-37	24-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-37	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
LF-37	18-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-37	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-37	16-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-37	14-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-37	30-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-37	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-37	22-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	22-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-37	23-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-38	14-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-38	28-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-38	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-38	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
DUP	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-38	17-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	17-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-38	10-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-38	05-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-38	12-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-38	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-38	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-38	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-38	10-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-38	15-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
DUP	15-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-38	15-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-38	08-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-38	27-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-38	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-38	03-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-38	12-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-38	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-38	19-Jan-05	<0.0005	0.0039	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	18-Apr-05	<0.0005	0.0043	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	18-Jul-05	<0.0005	0.0045	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	24-Oct-05	<0.0005	0.0046	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0017	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	23-Jan-06	<0.0005	0.0051	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	18-Apr-06	<0.0005	0.005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	19-Apr-07	<0.0005	0.0051	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	16-Apr-08	<0.0005	0.0054	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	14-Apr-09	<0.0005	0.0061	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	28-Apr-10	<0.0005	0.0062	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0021	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-38	17-Apr-12	<0.0005	0.0057	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0022	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.001
DUP	17-Apr-12	<0.0005	0.0059	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0021	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.001
LF-38	22-Apr-13	<0.0005	0.0051	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0017	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.001
LF-38	23-Apr-14	<0.0005	0.004	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.001
LF-39	14-Jan-00	<0.0005	0.013	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0026	<0.0005	<0.01	0.001	<0.0005	0.0007	0.0083	<0.0005	<0.001
LF-39	28-Apr-00	<0.0005	0.017	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.006	<0.0005	<0.01	0.001	<0.0005	0.0026	0.0095	<0.0005	<0.001
LF-39	25-Jul-00	<0.0005	0.03	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	0.0009	<0.0005	0.0066	0.014	<0.0005	<0.001
LF-39	10-Oct-00	<0.0005	0.015	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0027	<0.0005	<0.01	0.0013	<0.0005	0.0008	0.0085	<0.0005	<0.001
LF-39	24-Jan-01	<0.0005	0.045	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.024	<0.0005	<0.01	0.0006	<0.0005	0.012	0.018	<0.0005	<0.001
LF-39	09-Apr-01	<0.0005	0.016	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.01	<0.0005	<0.01	0.0009	<0.0005	0.0039	0.0094	<0.0005	<0.001
LF-39	05-Jul-01	<0.0005	0.032	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	0.0008	<0.0005	0.0077	0.013	<0.0005	<0.001
LF-39	15-Oct-01	<0.0005	0.063	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.022	<0.0005	<0.01	<0.0005	<0.0005	0.0086	0.013	<0.0005	<0.001
LF-39	08-Jan-02	<0.0005	0.024	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0057	<0.0005	<0.01	0.0012	<0.0005	0.0026	0.0085	<0.0005	<0.001
LF-39	08-Apr-02	<0.0005	0.018	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.004	<0.0005	<0.01	0.0013	<0.0005	0.0014	0.0092	<0.0005	<0.001
LF-39	08-Jul-02	<0.0005	0.018	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0058	<0.0005	<0.01	0.0014	<0.0005	0.0025	0.01	<0.0005	<0.001
LF-39	09-Oct-02	<0.0005	0.014	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0026	<0.0005	<0.01	0.0012	<0.0005	0.0009	0.0087	<0.0005	<0.001
LF-39	14-Jan-03	<0.0005	0.014	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0029	<0.0005	<0.01	0.0014	<0.0005	0.0009	0.0095	<0.0005	<0.001
DUP	14-Jan-03	<0.0005	0.014	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0029	<0.0005	<0.01	0.0014	<0.0005	0.001	0.0099	<0.0005	<0.001
LF-39	15-Apr-03	<0.0005	0.015	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	0.001	<0.0005	0.0009	0.0079	<0.0005	<0.001
LF-39	08-Jul-03	<0.0005	0.012	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0028	<0.0005	<0.01	0.0012	<0.0005	0.0008	0.0063	<0.0005	<0.001
LF-39	28-Oct-03	<0.0005	0.011	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0023	<0.0005	<0.01	0.0012	<0.0005	0.0006	0.0072	<0.0005	<0.001
LF-39	19-Jan-04	<0.0005	0.013	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0025	<0.0005	<0.01	0.0013	<0.0005	0.0007	0.0076	<0.0005	<0.001
LF-39	03-May-04	<0.0005	0.011	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0022	<0.0005	<0.01	0.0013	<0.0005	0.0007	0.0073	<0.0005	<0.001
LF-39	12-Jul-04	<0.0005	0.011	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0021	<0.0005	<0.01	0.001	<0.0005	0.0006	0.0065	<0.0005	<0.001
LF-39	13-Oct-04	<0.0005	0.0082	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	<0.01	0.0012	<0.0005	0.0005	0.0056	<0.0005	<0.001
LF-39	17-Jan-05	<0.0005	0.01	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0025	<0.0005	<0.01	0.001	<0.0005	0.0008	0.0071	<0.0005	<0.001
LF-39	18-Apr-05	<0.0005	0.013	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0023	<0.0005	<0.01	0.0011	<0.0005	0.0006	0.0072	<0.0005	<0.001
LF-39	18-Jul-05	<0.0005	0.012	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0023	<0.0005	<0.01	0.0011	<0.0005	0.0008	0.007	<0.0005	<0.001
LF-39	27-Oct-05	<0.0005	0.02	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0051	<0.0005	<0.01	0.0011	<0.0005	0.0031	0.0078	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-38	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	18-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	18-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	18-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	28-Apr-10	<0.0005	<0.0005	<0.0005	0.0005 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	22-Apr-13	0.0001 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-38	23-Apr-14	0.0001 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	14-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	24-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	05-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	09-Oct-02	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	14-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	14-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	28-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	03-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	17-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	18-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	18-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	27-Oct-05	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-38	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-38	18-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-38	18-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-38	24-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-38	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-38	18-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-38	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-38	16-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-38	14-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-38	28-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-38	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
DUP	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-38	22-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-38	23-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-39	14-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-39	28-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	0.0054 J	<0.0005	0.0018	<0.0005	<0.0005
LF-39	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0029	<0.0005	<0.0005
LF-39	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
LF-39	24-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0042	<0.0005	<0.0005
LF-39	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
LF-39	05-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0033	<0.0005	<0.0005
LF-39	15-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0053	<0.0005	<0.0005
LF-39	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
LF-39	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-39	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
LF-39	09-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-39	14-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
DUP	14-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-39	15-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-39	08-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-39	28-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-39	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-39	03-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-39	12-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-39	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-39	17-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-39	18-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-39	18-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-39	27-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0017	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexanone	Acetone	Benzene	Chlorobenzene	Chloroform	cis-1,2-DCE	Ethylbenzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-39	23-Jan-06	<0.0005	0.011	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	0.0012	<0.0005	0.0009	0.007	<0.0005	<0.001
LF-39	17-Apr-06	<0.0005	0.014	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0023	<0.0005	<0.01	0.0014	<0.0005	0.0006	0.0074	<0.0005	<0.001
LF-39	18-Apr-07	<0.0005	0.0099	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0026	<0.0005	<0.01	0.0014	<0.0005	0.0007	0.0071	<0.0005	<0.001
LF-39	17-Apr-08	<0.0005	0.015	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.004	<0.0005	<0.01	0.001	<0.0005	0.0015	0.0066	<0.0005	<0.001
LF-39	15-Apr-09	<0.0005	0.0079	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0032	<0.0005	<0.01	0.0012	<0.0005	0.001	0.0063	<0.0005	<0.001
LF-39	28-Apr-10	<0.0005	0.006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0039	<0.0005	<0.01	0.001	<0.0005	0.0011	0.0061	<0.0005	<0.001
LF-39	17-Apr-12	<0.0005	0.0032	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.004	<0.0005	<0.01	0.0006	<0.0005	0.0014	0.0039	<0.0005	<0.001
LF-39	22-Apr-13	<0.0005	0.0027	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0029	<0.0005	<0.01	0.0007	<0.0005	0.0011	0.0039	<0.0005	<0.001
LF-39	22-Apr-14	<0.0005	0.0026	<0.0005	<0.01	<0.01 U5	<0.0005	<0.0005	<0.0005	0.0038	<0.0005	<0.01	0.0007	0.0005 J	0.0011	0.0038	<0.0005	<0.001
DUP	22-Apr-14	<0.0005	0.0025	<0.0005	<0.01	<0.01 U5	<0.0005	<0.0005	<0.0005	0.0039	<0.0005	<0.01	0.0007	0.0005 J	0.0011	0.0038	<0.0005	<0.001
LF-4	02-Jun-89	<0	<0.02	na	0.26	1.3	<0.2	<0.02	na	na	1.3	4.7	<0.02	<0.2	na	<0.02	na	3.8
DUP	02-Jun-89	<0	<0.02	na	0.28	1.3	<0.2	<0.02	na	na	1.7	4.7	<0.02	<0.02	na	<0.02	na	4.1
LF-4	06-Dec-89	<0	<0.002	na	<0.002	<0.02	<0.02	<0.002	na	na	0.2	<0.04	<0.002	<0.004	na	<0.002	na	0.65
DUP	06-Dec-89	<0	<0.005	na	<0.005	<0.05	<0.005	<0.005	na	na	0.25	<0.1	<0.005	<0.005	na	<0.005	na	0.75
LF-4	20-Jul-90	<0	<0.1	na	<0.1	<1	<1	<0.1	na	na	<0.1	<2	<0.1	<0.1	na	<0.1	na	0.38
LF-4	21-Jun-91	<0	<0.01	na	<0.02	0.079	0.039	0.005	na	na	0.058	<0.04	<0.01	0.007	na	<0.01	na	0.35
DUP	21-Jun-91	<0	<0.01	na	<0.02	<0.04	0.04	0.006	na	0.02	0.14	<0.04	<0.01	0.008	na	<0.01	na	0.38
LF-4	09-Jul-92	<0	<0.005	na	<0.01	<0.02	0.016	0.008	na	na	0.015	<0.02	<0.005	<0.005	na	<0.005	na	0.069
LF-4	09-Jun-93	<0	<0.05	na	<0.1	<0.2	0.051	<0.05	na	na	0.21	<0.2	<0.05	<0.05	na	<0.05	na	1.5
LF-4	02-Mar-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	0.0013	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-4	09-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	0.0039 J3	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-4	16-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0038	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-4	19-Oct-98	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.005 UJ2	<0.005 UJ2	<0.001 UJ2	0.0037 J2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.005 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2
LF-4	14-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	0.0007 J11	0.0045	<0.001	0.0007 J11	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-4	22-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	0.0007 J11	0.0051	<0.001	0.0009 J11	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0005 J11
LF-4	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0043	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0042	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-4	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0042	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-4	25-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0008	0.0033	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	25-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	0.018	0.0007	0.0032	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-4	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0028	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-4	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-4	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0022 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-4	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-4	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-4	25-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0028	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-4	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-39	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	17-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	17-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-39	22-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0002 J	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	22-Apr-14	<0.0005	0.0002 J	<0.0005	<0.0005	<0.0005	0.0002 J	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-4	02-Jun-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	02-Jun-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-4	06-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	06-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-4	20-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-4	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-4	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-4	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-4	02-Mar-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0018	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	0.001	<0.001
LF-4	09-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014 J3	<0.001
LF-4	16-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-4	19-Oct-98	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.005 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2
LF-4	14-Jan-99	<0.001	<0.001	0.0013	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-4	22-Apr-99	<0.001	<0.001	0.0015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-4	16-Jul-99	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	16-Jul-99	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-4	15-Oct-99	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-4	25-Jan-00	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	25-Jan-00	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-4	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-4	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-4	20-Jan-03	<0.0005	<0.0005	0.0005 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-4	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-4	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-4	25-Jan-06	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-4	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-39	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-39	17-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
LF-39	18-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
LF-39	17-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0017	<0.0005	<0.0005
LF-39	15-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-39	28-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-39	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
LF-39	22-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-39	22-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
DUP	22-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
LF-4	02-Jun-89	na	na	0.14	na	na	na	na	na	na	na	na
DUP	02-Jun-89	na	na	0.095	na	na	na	na	na	na	na	na
LF-4	06-Dec-89	na	na	0.015	na	na	na	na	na	na	na	na
DUP	06-Dec-89	na	na	0.007	na	na	na	na	na	na	na	na
LF-4	20-Jul-90	na	na	0.01	na	na	na	na	na	na	na	na
LF-4	21-Jun-91	na	na	<0.011	na	na	na	na	na	na	na	na
DUP	21-Jun-91	na	na	<0.011	na	na	na	na	na	na	na	na
LF-4	09-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-4	09-Jun-93	na	na	0.01	na	na	na	na	na	na	na	na
LF-4	02-Mar-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-4	09-Apr-98	<0.001	<0.001	0.0014 J3	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-4	16-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-4	19-Oct-98	<0.001 UJ2	<0.001 UJ2	<0.0021 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	na	<0.001 UJ2	<0.002 UJ2	<0.001 UJ2	<0.001 UJ2
LF-4	14-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-4	22-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-4	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
DUP	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-4	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-4	25-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	25-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-4	25-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-4	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-4	20-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-4	22-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-4	20-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	20-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-4	25-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-4	18-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	18-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-4	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.001
LF-4	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-4	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-40	14-Jan-00	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0005 R	<0.0005	<0.001
LF-40	28-Apr-00	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-40	25-Jul-00	<0.0005	0.0017	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0007	<0.0005	<0.001
LF-40	10-Oct-00	<0.0005	0.0016	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.001
LF-40	24-Jan-01	<0.0005	0.0018	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0008	0.0006	<0.001
LF-40	09-Apr-01	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0011	<0.001
DUP	09-Apr-01	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.001	<0.001
LF-40	05-Jul-01	<0.0005	0.0014	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0007	0.0011	<0.001
LF-40	15-Oct-01	<0.0005	0.0023	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0023	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0006	0.0009	<0.001
LF-40	08-Jan-02	<0.0005	0.0013	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0022	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.001	<0.001
LF-40	08-Apr-02	<0.0005	0.0023	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0026	<0.0005	<0.01	<0.0005	<0.0005	0.0005	0.0012	0.0009	<0.001
LF-40	08-Jul-02	<0.0005	0.0019	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0029	<0.0005	<0.01	<0.0005	<0.0005	0.0006	0.0009	0.0009	<0.001
LF-40	09-Oct-02	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	<0.0005	<0.0005	0.0005 J	<0.0005	0.0009	<0.001
LF-40	14-Jan-03	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.001
LF-40	15-Apr-03	<0.0005	0.0026	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0023	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.001
LF-40	08-Jul-03	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0022	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	<0.001
LF-40	28-Oct-03	<0.0005	0.012	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0021	<0.0005	<0.01	0.0011	<0.0005	0.0006	0.0068	<0.0005	<0.001
LF-40	19-Jan-04	<0.0005	0.0009 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0022 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0011 J	<0.001
LF-40	03-May-04	<0.0005	0.0012	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0026	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0006	0.0008	<0.001
DUP	03-May-04	<0.0005	0.0012	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0025	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0006	0.0008	<0.001
LF-40	12-Jul-04	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0027	<0.0005	<0.01	<0.0005	<0.0005	0.0005	<0.0005	0.0009	<0.001
LF-40	13-Oct-04	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	<0.0005	<0.0005	0.0005	<0.0005	0.0007	<0.001
LF-40	17-Jan-05	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	0.0004 J	0.0004 J	<0.001
LF-40	18-Apr-05	<0.0005	0.0017	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0027	<0.0005	<0.01	<0.0005	<0.0005	0.0005	0.0009	0.0009	<0.001
LF-40	18-Jul-05	<0.0005	0.0011	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0028	<0.0005	<0.01	<0.0005	<0.0005	0.0006	0.0007	<0.0005	<0.001
LF-40	27-Oct-05	<0.0005	0.0014 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0049 J	<0.0005	<0.01	<0.0005	<0.0005	0.0016 J	0.0008 J	0.0007 J	<0.001
LF-40	23-Jan-06	<0.0005	0.0014	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0049	<0.0005	<0.01	<0.0005	<0.0005	0.0014	0.0007	0.0008	<0.001
LF-40	17-Apr-06	<0.0005	0.0017	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0041	<0.0005	<0.01	<0.0005	<0.0005	0.0011	0.0012	0.0006	<0.001
DUP	17-Apr-06	<0.0005	0.0021	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0038	<0.0005	<0.01	<0.0005	<0.0005	0.0011	0.0011	0.0007	<0.001
LF-40	18-Apr-07	<0.0005	0.0017	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.005	<0.0005	<0.01	<0.0005	<0.0005	0.0016	0.001	0.0007	<0.001
LF-40	17-Apr-08	<0.0005	0.002	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0035	<0.0005	<0.01	<0.0005	<0.0005	0.0012	0.0013	0.0005	<0.001
LF-40	15-Apr-09	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.002	<0.0005	<0.01	<0.0005	<0.0005	0.0006	0.0007	<0.0005	<0.001
LF-40	28-Apr-10	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	0.0004 J	<0.0005	<0.001
LF-40	17-Apr-12	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	0.0003 J	<0.0005	<0.001
LF-40	22-Apr-13	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	0.0002 J	0.0003 J	<0.0005	<0.001
LF-40	22-Apr-14	<0.0005	0.0005 J	<0.0005	<0.01	0.0011 J	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	0.0002 J	0.0004 J	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-4	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-4	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-4	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	14-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0026	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	24-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	05-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	09-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	14-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	28-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	03-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	03-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	17-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	18-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	18-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	27-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	17-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	17-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	17-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-40	22-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0002 J	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-4	14-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-4	16-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-4	26-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-40	14-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
LF-40	28-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-40	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
LF-40	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
LF-40	24-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-40	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
DUP	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-40	05-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
LF-40	15-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0018	<0.0005	<0.0005
LF-40	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
LF-40	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0017	<0.0005	<0.0005
LF-40	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-40	09-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-40	14-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
LF-40	15-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-40	08-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-40	28-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-40	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011 J	<0.0005	<0.0005
LF-40	03-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
DUP	03-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-40	12-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-40	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-40	17-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-40	18-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-40	18-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-40	27-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008 J	<0.0005	<0.0005
LF-40	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-40	17-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
DUP	17-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-40	18-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-40	17-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-40	15-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-40	28-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-40	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-40	22-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-40	22-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0001 J	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-41	13-Jan-00	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0069	<0.0005	<0.01	<0.0005	<0.0005	0.0025	<0.0005	0.0018	<0.001
DUP	13-Jan-00	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0066	<0.0005	<0.01	<0.0005	<0.0005	0.0025	<0.0005	0.0016	<0.001
LF-41	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.007	<0.0005	<0.01	<0.0005	<0.0005	0.0029	<0.0005	0.0025	<0.001
LF-41	25-Jul-00	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0088	<0.0005	<0.01	<0.0005	<0.0005	0.0032	<0.0005	0.002	<0.001
LF-41	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0078	<0.0005	<0.01	<0.0005	<0.0005	0.0027	<0.0005	0.0037	<0.001
DUP	10-Oct-00	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0078	<0.0005	<0.01	<0.0005	<0.0005	0.0026	<0.0005	0.0035	<0.001
LF-41	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.009	<0.0005	<0.01	<0.0005	<0.0005	0.0032	<0.0005	0.0029	<0.001
LF-41	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0097	<0.0005	<0.01	<0.0005	<0.0005	0.0033	<0.0005	0.0036	<0.001
LF-41	05-Jul-01	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0088	<0.0005	<0.01	<0.0005	<0.0005	0.0034	<0.0005	0.0038	<0.001
LF-41	12-Oct-01	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0039	<0.0005	0.0031	<0.001
LF-41	08-Jan-02	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.005	<0.0005	0.0039	<0.001
LF-41	03-Apr-02	na	na	na	na	na	<0.001	na	na	na	<0.001	na	na	<0.001	na	na	na	<0.001
DUP	03-Apr-02	na	na	na	na	na	<0.001	na	na	na	<0.001	na	na	<0.001	na	na	na	<0.001
LF-41	08-Apr-02	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0043	<0.0005	0.0021	<0.001
LF-41	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0099	<0.0005	<0.01	<0.0005	<0.0005	0.004	<0.0005	0.0024	<0.001
LF-41	09-Oct-02	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0085	<0.0005	<0.01	<0.0005	<0.0005	0.0029	<0.0005	0.0016	<0.001
LF-41	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.01	<0.0005	<0.01	<0.0005	<0.0005	0.0041	<0.0005	0.0024	<0.001
LF-41	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0042	<0.0005	0.0019	<0.001
LF-41	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0092	<0.0005	<0.01	<0.0005	<0.0005	0.0032	<0.0005	0.0028	<0.001
LF-41	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.009	<0.0005	<0.01	<0.0005	<0.0005	0.0028	<0.0005	0.0021	<0.001
LF-41	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.01	<0.0005	<0.01	<0.0005	<0.0005	0.0035	<0.0005	0.0024	<0.001
LF-41	03-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0042	<0.0005	0.0012	<0.001
LF-41	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0041	<0.0005	0.0015	<0.001
LF-41	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0087	<0.0005	<0.01	<0.0005	<0.0005	0.0029	<0.0005	0.0013	<0.001
LF-41	17-Jan-05	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0051	0.0003 J	0.0027	<0.001
LF-41	19-Apr-05	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	<0.0005	<0.0005	0.0064	0.0003 J	0.0022	<0.001
DUP	19-Apr-05	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.014	<0.0005	<0.01	<0.0005	<0.0005	0.0063	<0.0005	0.0021	<0.001
LF-41	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0052	<0.0005	0.0013	<0.001
LF-41	24-Oct-05	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.017	<0.0005	<0.01	<0.0005	<0.0005	0.0071	<0.0005	0.0017	<0.001
LF-41	23-Jan-06	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.01	<0.0005	<0.0005	0.0071	<0.0005	0.0022	<0.001
DUP	23-Jan-06	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.01	<0.0005	<0.0005	0.0073	<0.0005	0.0022	<0.001
LF-41	17-Apr-06	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.014	<0.0005	<0.01	<0.0005	<0.0005	0.0078	0.0004 J	0.0025	<0.001
LF-41	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-41	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-41	19-Oct-11	<0.0005	0.0002 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	0.0002 J	<0.0005	<0.0005	<0.001
LF-41	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
LF-41	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	0.0005 J	<0.0005	0.0003 J	<0.001
LF-41	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	0.0002 J	<0.0005	0.0002 J	<0.001
LF-41	23-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	0.0013 J	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-41	13-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	13-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	05-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-41	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	09-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	03-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	17-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	17-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	19-Oct-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-41	23-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-41	13-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0073	<0.0005	<0.0005
DUP	13-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0072	<0.0005	<0.0005
LF-41	28-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0059	<0.0005	<0.0005
LF-41	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0061	<0.0005	<0.0005
LF-41	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0046	<0.0005	<0.0005
DUP	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0049	<0.0005	<0.0005
LF-41	17-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0038	<0.0005	<0.0005
LF-41	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0027	<0.0005	<0.0005
LF-41	05-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0027	<0.0005	<0.0005
LF-41	12-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0033	<0.0005	<0.0005
LF-41	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0024	<0.0005	<0.0005
LF-41	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na
DUP	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na
LF-41	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0024	<0.0005	<0.0005
LF-41	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
LF-41	09-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0019	<0.0005	<0.0005
LF-41	15-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
LF-41	15-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
LF-41	09-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
LF-41	27-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-41	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
LF-41	03-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
LF-41	12-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
LF-41	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-41	17-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
LF-41	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
DUP	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-41	19-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-41	24-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
LF-41	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
DUP	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
LF-41	17-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-41	15-Apr-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-41	21-Jul-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-41	19-Oct-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-41	23-Feb-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-41	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-41	22-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-41	23-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
DUP	23-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	12-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0023	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	12-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0023	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	01-May-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0019	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	01-May-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0026	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0018	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0014	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0016	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0016	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0014	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0015	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0015	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	10-Oct-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0015	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0014	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	28-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0016	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	04-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0014	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0009	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	19-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0009	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0009	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-42	24-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	0.0002 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
DUP	23-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	12-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	12-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	01-May-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	01-May-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	09-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	10-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	28-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	04-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	19-Jul-05	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	26-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	19-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-42	24-Apr-13	<0.0005	<0.0005	0.0001 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
DUP	23-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	12-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	12-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	01-May-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
DUP	01-May-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-42	24-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	25-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	10-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	06-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	06-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	15-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-42	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	09-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	09-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	09-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-42	10-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-42	17-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	16-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	09-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	28-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-42	22-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-42	04-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	15-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
LF-42	14-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
DUP	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
LF-42	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
LF-42	19-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
LF-42	26-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
LF-42	24-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-42	19-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0007	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-42	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-42	14-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	16-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	16-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	26-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-42	24-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0002 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexanone	Acetone	Benzene	Chlorobenzene	Chloroform	cis-1,2-DCE	Ethylbenzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-42	25-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	0.0001 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-5	01-Jun-89	<0	<1	na	<2	220	<2	<1	na	na	2	390	<1	300	na	<2	na	8
LF-5	06-Dec-89	<0	<1	na	<1	51	<1	<1	na	na	<1	320	<1	310	na	<1	na	<1
LF-5	20-Jul-90	<0	<1	na	6.7	<10	<1	<1	na	na	1.1	170	<1	170	na	<1	na	2.6
LF-5	21-Jun-91	<0	<5	na	<10	<20	<5	<5	na	na	<5	<20	<5	200 GT	na	<5	na	5.4
LF-5	06-Aug-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-5	09-Jul-92	<0	<5	na	<10	<20	<5	<5	na	na	<5	<20	<5	150	na	<5	na	<5
LF-5	09-Jun-93	<0	<2.5	na	<5	<10	<2.5	<2.5	na	na	<2.5	<10	<2.5	83	na	<2.5	na	4.5
LF-6	01-Jun-89	<0	<0.2	na	<1	280	<1	<0.2	na	na	6	470	<0.2	22	na	<1	na	210
LF-6	05-Dec-89	<0	<1	na	<1	64	<1	<1	na	na	5	320	<1	59	na	<1	na	17
LF-6	20-Jul-90	<0	<1	na	24	200	<1	<1	na	na	4	720	45	45	na	<1	na	13
LF-7	01-Jun-89	<0	<0.001	na	<0.005	<0.005	0.05	<0.001	na	na	<0.005	<0.005	<0.001	0.27	na	<0.005	na	0.58
LF-7	06-Dec-89	<0	<0.001	na	<0.001	<0.01	0.031	0.007	na	na	0.052	<0.02	<0.001	0.003	na	<0.001	na	0.15
LF-7	19-Jul-90	<0	<0.001	na	<0.001	<0.01	<0.001	0.001	na	na	0.007	<0.02	<0.001	<0.001	na	<0.001	na	0.044
LF-7	08-Aug-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-7	20-Jun-91	<0	<0.005	na	<0.01	<0.02	0.061	0.007	na	na	0.045	<0.02	<0.005	<0.005	na	<0.005	na	0.12
LF-7	06-Aug-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-7	17-Dec-91	<0.005	<0.005	na	<0.010	<0.020	0.006	0.005	na	na	0.006	<0.020	<0.005	<0.005	na	<0.005	na	0.009
LF-7	09-Jul-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
DUP	09-Jul-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-7	09-Jun-93	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
DUP	09-Jun-93	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-7	06-Jan-94	<0	<0.003	<0.003	<0.03	<0.05	0.031	0.009	<0.003	<0.003	0.003	<0.05	<0.003	0.12	<0.003	<0.003	<0.005	0.014
LF-7	27-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	0.004	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
DUP	27-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	0.0037	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-7	13-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0038	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-7	20-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0067	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-7	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0069	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-7	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0063	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-7	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0076	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-7	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0079	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-7	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0068	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-7	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0073	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-7	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-7	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0097	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0099	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-7	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-7	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-42	25-Apr-14	<0.0005	<0.0005	0.0001 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-5	01-Jun-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-5	06-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-5	20-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-5	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-5	06-Aug-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-5	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-5	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-6	01-Jun-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-6	05-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-6	20-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-7	01-Jun-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-7	06-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-7	19-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-7	08-Aug-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-7	20-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-7	06-Aug-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-7	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-7	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-7	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-7	06-Jan-94	<0.003	<0.003	na	<0.003	<0.003	na	na	na	<0.03	na	<0.005	<0.005	<0.005	na	na	na
LF-7	27-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
DUP	27-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-7	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-7	20-Jan-00	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-7	25-Jan-01	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-7	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-7	17-Jan-03	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-7	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-7	19-Jan-05	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-7	24-Jan-06	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-7	19-Apr-07	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Apr-07	<0.0005	<0.0005	0.0005 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-7	14-Apr-08	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	14-Apr-08	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-7	16-Apr-09	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-7	27-Apr-10	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-42	25-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0002 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-5	01-Jun-89	na	na	0.02	na	na	na	na	na	na	na	na
LF-5	06-Dec-89	na	na	0.025	na	na	na	na	na	na	na	na
LF-5	20-Jul-90	na	na	<0.02	na	na	na	na	na	na	na	na
LF-5	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na
LF-5	06-Aug-91	na	na	<0.05	na	na	na	na	na	na	na	na
LF-5	09-Jul-92	na	na	<0.02	na	na	na	na	na	na	na	na
LF-5	09-Jun-93	na	na	0.01	na	na	na	na	na	na	na	na
LF-6	01-Jun-89	na	na	na	na	na	na	na	na	na	na	na
LF-6	05-Dec-89	na	na	0.06	na	na	na	na	na	na	na	na
LF-6	20-Jul-90	na	na	<0.02	na	na	na	na	na	na	na	na
LF-7	01-Jun-89	na	na	0.008	na	na	na	na	na	na	na	na
LF-7	06-Dec-89	na	na	<0.002	na	na	na	na	na	na	na	na
LF-7	19-Jul-90	na	na	na	na	na	na	na	na	na	na	na
LF-7	08-Aug-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-7	20-Jun-91	na	na	na	na	na	na	na	na	na	na	na
LF-7	06-Aug-91	na	na	0.005	na	na	na	na	na	na	na	na
LF-7	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-7	09-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
DUP	09-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-7	09-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
DUP	09-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-7	06-Jan-94	na	na	na	<0.003	na	na	<0.03	na	na	na	<0.003
LF-7	27-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
DUP	27-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-7	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-7	20-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-7	25-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-7	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-7	17-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-7	22-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-7	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
LF-7	24-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-7	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	0.0004 J	<0.0005	<0.0005	<0.0005
DUP	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0005 J	<0.01	0.0004 J	<0.0005	<0.0005	<0.0005
LF-7	14-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	0.0004 J	<0.0005	<0.0005	<0.0005
DUP	14-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	0.0004 J	<0.0005	<0.0005	<0.0005
LF-7	16-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	0.0004 J	<0.0005	<0.0005	<0.0005
LF-7	27-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	0.0005 J	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-8	05-Dec-89	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	0.003	na	<0.001	na	<0.001
LF-8	19-Jul-90	<0	<0.001	na	<0.001	<0.01	<0.001	0.001	na	na	0.007	<0.02	<0.001	<0.001	na	<0.001	na	0.002
LF-8	08-Aug-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-8	21-Dec-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-8	20-Jun-91	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-8	17-Dec-91	<0.005	<0.005	na	<0.010	<0.020	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
LF-8	09-Jul-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-8	30-Dec-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-8	09-Jun-93	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-8	06-Jan-94	<0	<0.003	<0.003	<0.03	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005
LF-8	27-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-8	08-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-8	15-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-8	21-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-8	13-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-8	21-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0012	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-8	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-8	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-8	19-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-8	22-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0018	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-8	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0028	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-8	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0025 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0025	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-8	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0028	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-8	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0004 J	0.0028	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-8	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0003 J	0.0031	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-8	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0003 J	0.0037	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J
LF-8	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0004 J	0.0035	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-8	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0004 J	0.0033	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-8	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.003	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-9	05-Dec-89	<0	<0.001	na	<0.001	<0.01	<0.001	0.005	na	na	0.022	<0.02	<0.001	0.003	na	<0.001	na	<0.001
LF-9	19-Jul-90	<0	<0.001	na	<0.001	<0.01	<0.001	0.004	na	na	0.011	<0.02	<0.001	<0.001	na	<0.001	na	0.002
LF-9	21-Dec-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-9	21-Jun-91	<0	<0.005	na	<0.01	<0.02	<0.005	0.006	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-9	16-Dec-91	<0.005	<0.005	na	<0.010	<0.020	<0.005	<0.005	na	na	0.009	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
LF-9	09-Jul-92	<0	<0.005	na	<0.01	<0.02	<0.005	0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-9	30-Dec-92	<0	<0.005	na	<0.01	<0.02	<0.005	0.005	na	na	0.007	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-9	09-Jun-93	<0	<0.005	na	<0.01	<0.02	0.005	0.005	na	na	<0.005	<0.02	<0.005	0.005	na	<0.005	na	<0.005
LF-B1 (a)	07-Dec-89	<0	0.051	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgLl)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-8	05-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-8	19-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-8	08-Aug-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-8	21-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-8	20-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-8	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-8	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-8	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-8	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-8	06-Jan-94	<0.003	<0.003	na	<0.003	<0.003	na	na	na	<0.03	na	<0.005	<0.005	<0.005	na	na	na
LF-8	27-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-8	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-8	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-8	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-8	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-8	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-8	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-8	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-8	19-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-8	22-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-8	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-8	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	20-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-8	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-8	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-8	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-8	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-8	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-8	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-8	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-9	05-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-9	19-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-9	21-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-9	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-9	16-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-9	09-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-9	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-9	09-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B1 (a)	07-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-8	05-Dec-89	na	na	0.06	na	na	na	na	na	na	na	na
LF-8	19-Jul-90	na	na	na	na	na	na	na	na	na	na	na
LF-8	08-Aug-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-8	21-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-8	20-Jun-91	na	na	<0.013	na	na	na	na	na	na	na	na
LF-8	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-8	09-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-8	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na
LF-8	09-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-8	06-Jan-94	na	na	na	<0.003	na	na	<0.03	na	na	na	<0.003
LF-8	27-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-8	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-8	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-8	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-8	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-8	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-8	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-8	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-8	19-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-8	22-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-8	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-8	20-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	20-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-8	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-8	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-8	24-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0007	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-8	20-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0013	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-8	14-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0011	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-8	16-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0019	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-8	26-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.001	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-9	05-Dec-89	na	na	<0.002	na	na	na	na	na	na	na	na
LF-9	19-Jul-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-9	21-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-9	21-Jun-91	na	na	<0.01	na	na	na	na	na	na	na	na
LF-9	16-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-9	09-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-9	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na
LF-9	09-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-B1 (a)	07-Dec-89	na	na	<0.002	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-B1 (a)	18-Jul-90	<0	0.17	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	0.001	<0.002	na	<0.001	na	<0.001
LF-B1 (a)	20-Dec-90	<0	0.13	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-B1 (a)	20-Jun-91	<0	0.18	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B1 (a)	16-Dec-91	<0.005	0.160	na	<0.010	<0.020	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
LF-B1 (a)	08-Jul-92	<0	0.15	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B1 (a)	30-Dec-92	<0	0.14	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B1 (a)	08-Jun-93	<0	0.16	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B2	06-Dec-89	<0	0.007	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	0.013
LF-B2	18-Jul-90	<0	0.007	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	0.002	na	<0.001	na	<0.001
DUP	18-Jul-90	<0	0.007	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	0.002	na	<0.001	na	<0.001
LF-B2	19-Dec-90	<0	0.004	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	0.002	<0.001	na	<0.001	na	<0.001
LF-B2	20-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B2	20-Jun-91	<0	0.15	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B2	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B2	16-Dec-91	<0.005	<0.005	na	<0.010	<0.020	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
LF-B2	08-Jul-92	<0	0.006	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B2	08-Jun-93	<0	0.006	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B3	07-Dec-89	<0	0.1	na	0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
DUP	07-Dec-89	<0	0.073	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-B3	18-Jul-90	<0	0.086	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	0.002	na	<0.001	na	<0.001
LF-B3	20-Dec-90	<0	0.084	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	<0.001	na	<0.001	na	<0.001
LF-B3	19-Jun-91	<0	0.11	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B3	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B3	16-Dec-91	<0.005	0.087	na	<0.010	0.026	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.005	na	<0.005	na	<0.005
LF-B3	08-Jul-92	<0	0.11	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B3	30-Dec-92	<0	0.11	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B3	08-Jun-93	<0	0.11	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B3	05-Jan-94	<0	0.099	<0.003	<0.03	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005
LF-B3	16-Apr-96	<0	0.013	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B3	01-Aug-96	<0	0.022	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B3	21-Nov-96	<0	0.036	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
DUP	21-Nov-96	<0	0.021	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B3	17-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B3	12-Jun-97	<0	0.034	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B3	20-Aug-97	<0	0.032	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B3	17-Dec-97	<0	0.018	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B3	27-Feb-98	<0	0.022	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-B3	08-Apr-98	<0	0.0059	<0.001	<0.005	0.014	<0.001	<0.001	<0.001	<0.001	<0.001	0.0057	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B3	15-Jul-98	<0.001	0.019	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgLl)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-B1 (a)	18-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B1 (a)	20-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B1 (a)	20-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B1 (a)	16-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B1 (a)	08-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B1 (a)	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B1 (a)	08-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B2	06-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B2	18-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	18-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B2	19-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B2	20-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B2	20-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B2	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B2	16-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B2	08-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B2	08-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B3	07-Dec-89	na	na	na	na	na	na	na	na	0.001	na	na	na	na	na	na	na
DUP	07-Dec-89	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B3	18-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B3	20-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B3	19-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B3	21-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B3	16-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B3	08-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B3	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B3	08-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B3	05-Jan-94	<0.003	<0.003	na	<0.003	<0.003	na	na	na	<0.03	na	<0.005	<0.005	<0.005	na	na	na
LF-B3	16-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B3	01-Aug-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B3	21-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
DUP	21-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B3	17-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B3	12-Jun-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B3	20-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B3	17-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B3	27-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-B3	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B3	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-B1 (a)	18-Jul-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-B1 (a)	20-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-B1 (a)	20-Jun-91	na	na	<0.011	na	na	na	na	na	na	na	na
LF-B1 (a)	16-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-B1 (a)	08-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-B1 (a)	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na
LF-B1 (a)	08-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-B2	06-Dec-89	na	na	<0.002	na	na	na	na	na	na	na	na
LF-B2	18-Jul-90	na	na	<0.002	na	na	na	na	na	na	na	na
DUP	18-Jul-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-B2	19-Dec-90	na	na	na	na	na	na	na	na	na	na	na
LF-B2	20-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-B2	20-Jun-91	na	na	na	na	na	na	na	na	na	na	na
LF-B2	21-Jun-91	na	na	<0.011	na	na	na	na	na	na	na	na
LF-B2	16-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-B2	08-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-B2	08-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-B3	07-Dec-89	na	na	<0.002	0.001	na	na	0.001	na	na	na	na
DUP	07-Dec-89	na	na	na	na	na	na	na	na	na	na	na
LF-B3	18-Jul-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-B3	20-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-B3	19-Jun-91	na	na	na	na	na	na	na	na	na	na	na
LF-B3	21-Jun-91	na	na	<0.011	na	na	na	na	na	na	na	na
LF-B3	16-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-B3	08-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-B3	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na
LF-B3	08-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-B3	05-Jan-94	na	na	na	<0.003	na	na	<0.03	na	na	na	<0.003
LF-B3	16-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-B3	01-Aug-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B3	21-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
DUP	21-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B3	17-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B3	12-Jun-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B3	20-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B3	17-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B3	27-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.011	<0.001	<0.001
LF-B3	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-B3	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.012	<0.001	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-B3	21-Oct-98	<0.001	0.017	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B3	13-Jan-99	<0.001	0.018	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B3	22-Apr-99	<0.001	0.014	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B3	15-Jul-99	<0.0005	0.014	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	14-Oct-99	<0.0005	0.012	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	25-Jan-00	<0.0005	0.0029	<0.0005	<0.01	0.016	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	25-Jan-01	<0.0005	0.0014	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	15-Oct-01	<0.0005	0.0063	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	15-Oct-01	<0.0005	0.0061	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	10-Jan-02	<0.0005	0.0051	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	16-Jan-03	<0.0005	0.0059	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	21-Jan-04	<0.0005	0.0034	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	21-Jan-04	<0.0005	0.0035 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	20-Jan-05	<0.0005	0.0037	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	24-Jan-06	<0.0005	0.0028	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	19-Apr-07	<0.0005	0.003	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	16-Apr-08	<0.0005	0.0029	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	15-Apr-09	<0.0005	0.0029	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B3	30-Apr-10	<0.0005	0.0026	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B4	18-Jul-90	<0	0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	0.002	na	<0.001	na	<0.001
LF-B4	19-Dec-90	<0	<0.001	na	<0.001	<0.01	<0.001	<0.001	na	na	<0.001	<0.02	<0.001	0.002	na	<0.001	na	<0.001
LF-B4	19-Jun-91	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B4	17-Dec-91	<0.005	<0.005	na	<0.010	<0.020	<0.005	<0.005	na	na	<0.005	<0.020	<0.005	<0.050	na	<0.005	na	<0.005
LF-B4	08-Jul-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B4	30-Dec-92	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B4	08-Jun-93	<0	<0.005	na	<0.01	<0.02	<0.005	<0.005	na	na	<0.005	<0.02	<0.005	<0.005	na	<0.005	na	<0.005
LF-B4	05-Jan-94	<0	<0.003	<0.003	<0.03	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.05	<0.003	<0.003	<0.003	0.012	<0.005	<0.005
LF-B4	16-Apr-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B4	30-Jul-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B4	22-Nov-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	0.01	<0.005	<0.005	<0.01	<0.01
DUP	22-Nov-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B4	17-Mar-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B4	01-Jul-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B4	20-Aug-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B4	18-Dec-97	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B4	25-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-B4	07-Apr-98	<0	0.0012	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B4	15-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B4	19-Oct-98	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.005 UJ2	<0.005 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.005 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-pentanone	Bromobenzene	Carbon Disulfide	Chloroethane	Chloromethane	Dichlorodifluoromethane	Isopropylbenzene	n-Butylbenzene
LF-B3	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B3	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B3	22-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B3	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	25-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0026	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0023	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	10-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B3	30-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B4	18-Jul-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B4	19-Dec-90	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B4	19-Jun-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B4	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B4	08-Jul-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B4	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B4	08-Jun-93	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
LF-B4	05-Jan-94	<0.003	<0.003	na	<0.003	<0.003	na	na	na	<0.03	na	<0.005	<0.005	<0.005	na	na	na
LF-B4	16-Apr-96	<0.005	<0.005	<0.01	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B4	30-Jul-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B4	22-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
DUP	22-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B4	17-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B4	01-Jul-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B4	20-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B4	18-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B4	25-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-B4	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B4	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B4	19-Oct-98	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.005 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-B3	21-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.019	<0.001	<0.001
LF-B3	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.014	<0.001	<0.001
LF-B3	22-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.012	<0.001	<0.001
LF-B3	15-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.014	<0.0005	<0.0005
LF-B3	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.015	<0.0005	<0.0005
LF-B3	25-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0025	<0.0005	<0.0005
LF-B3	25-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.003	<0.0005	<0.0005
LF-B3	15-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.013	<0.0005	<0.0005
DUP	15-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.013	<0.0005	<0.0005
LF-B3	10-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0084	<0.0005	<0.0005
LF-B3	16-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.017	<0.0005	<0.0005
LF-B3	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.012	<0.0005	<0.0005
DUP	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.012 J	<0.0005	<0.0005
LF-B3	20-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.014	<0.0005	<0.0005
LF-B3	24-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.012	<0.0005	<0.0005
LF-B3	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.012	<0.0005	<0.0005
LF-B3	16-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.014	<0.0005	<0.0005
LF-B3	15-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.013	<0.0005	<0.0005
LF-B3	30-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.01	<0.0005	<0.0005
LF-B4	18-Jul-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-B4	19-Dec-90	na	na	<0.002	na	na	na	na	na	na	na	na
LF-B4	19-Jun-91	na	na	<0.01	na	na	na	na	na	na	na	na
LF-B4	17-Dec-91	na	na	na	na	na	na	na	na	na	na	na
LF-B4	08-Jul-92	na	na	<0.01	na	na	na	na	na	na	na	na
LF-B4	30-Dec-92	na	na	na	na	na	na	na	na	na	na	na
LF-B4	08-Jun-93	na	na	<0.01	na	na	na	na	na	na	na	na
LF-B4	05-Jan-94	na	na	na	<0.003	na	na	<0.03	na	na	na	<0.003
LF-B4	16-Apr-96	na	na	<0.01	<0.005	na	na	<0.05	<0.01	na	na	<0.005
LF-B4	30-Jul-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B4	22-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
DUP	22-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B4	17-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B4	01-Jul-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B4	20-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B4	18-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B4	25-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
LF-B4	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-B4	15-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-B4	19-Oct-98	<0.001 UJ2	<0.001 UJ2	0.002 J2	<0.001 UJ2	<0.001 UJ2	<0.001 UJ2	na	<0.001 UJ2	<0.002 UJ2	<0.001 UJ2	<0.001 UJ2

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-B4	11-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B4	20-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B4	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B4	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B4	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0031	<0.0005	<0.0005	<0.0005	<0.001
LF-B4	24-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	24-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B4	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B4	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B4	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B4	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B4	26-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B4	16-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B4	13-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B5 (b)	09-Apr-96	<0	0.28	<0.05	<0.5	<1	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1
LF-B5 (b)	01-Aug-96	<0	0.38	<0.03	<0.3	<0.5	<0.03	<0.03	<0.03	<0.03	<0.03	<0.5	<0.03	<0.03	<0.03	<0.03	<0.05	<0.05
LF-B5 (b)	22-Nov-96	<0	0.32	<0.03	<0.3	<0.5	<0.03	<0.03	<0.03	<0.03	<0.03	<0.5	<0.03	<0.03	<0.03	<0.03	<0.05	<0.05
LF-B5 (b)	17-Mar-97	<0	0.29	<0.03	<0.3	<0.5	<0.03	<0.03	<0.03	<0.03	<0.03	<0.5	<0.03	<0.03	<0.03	<0.03	<0.05	<0.05
LF-B5 (b)	12-Jun-97	<0	0.31	<0.03	<0.3	<0.5	<0.03	<0.03	<0.03	<0.03	<0.03	<0.5	<0.03	<0.03	<0.03	<0.03	<0.05	<0.05
LF-B5 (b)	20-Aug-97	<0	0.38	<0.05	<0.5	<1	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1
LF-B5 (b)	17-Dec-97	<0	0.34	<0.05	<0.5	<1	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1
LF-B5 (b)	27-Feb-98	<0	0.24	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0048	<0.001	<0.02	<0.001	<0.001	0.0023	0.009	<0.002	<0.002
LF-B5 (b)	09-Apr-98	<0	0.34	<0.01	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
LF-B5 (b)	16-Jul-98	<0.012	0.28	<0.012	<0.062	<0.062	<0.012	<0.012	<0.012	<0.012	<0.012	<0.062	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
LF-B5 (b)	23-Oct-98	<0.0025	0.24	<0.0025	<0.012	0.03	<0.0025	<0.0025	<0.0025	0.003	<0.0025	<0.012	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
LF-B5 (b)	13-Jan-99	<0.002	0.3	<0.002	<0.01	<0.01	<0.002	<0.002	<0.002	0.003	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
LF-B5 (b)	21-Apr-99	<0.001	0.31	0.0009 J11	<0.005	<0.005	<0.001	<0.001	<0.001	0.003	<0.001	<0.005	<0.001	<0.001	<0.001	0.0009 J11	<0.001	<0.001
LF-B5 (b)	15-Jul-99	<0.001	0.26	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0025	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
LF-B5 (b)	15-Oct-99	<0.001	0.27	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0044	<0.001	<0.02	<0.001	<0.001	<0.001	0.003	<0.001	<0.002
DUP	15-Oct-99	<0.001	0.26	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0029	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
LF-B5 (b)	21-Jan-00	<0.001	0.26	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0035	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
LF-B5 (b)	02-Feb-01	<0.0005	0.2	0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0008	0.0008	<0.001
LF-B5 (b)	10-Jan-02	<0.0005	0.21	0.0007	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0027	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.001
LF-B5 (b)	20-Jan-03	<0.0007	0.24	0.0008	<0.014	<0.014	<0.0007	<0.0007	<0.0007	0.0039	<0.0007	<0.014	<0.0007	<0.0007	<0.0007	0.0014	<0.0007	<0.0014
LF-B5 (b)	22-Jan-04	<0.0005	0.22	0.0007	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0032	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.001
DUP	22-Jan-04	<0.0005	0.22	0.0008	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0032	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.001
LF-B5 (b)	20-Jan-05	<0.002	0.21	<0.002	<0.04	<0.04	<0.002	<0.002	<0.002	0.0032	<0.002	<0.04	<0.002	<0.002	<0.002	0.0012 J	<0.002	<0.004
LF-B5 (b)	25-Jan-06	<0.002	0.21	<0.002	<0.04	<0.04	<0.002	<0.002	<0.002	0.0028	<0.002	<0.04	<0.002	<0.002	<0.002	0.0011 J	<0.002	<0.004

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-B4	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B4	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B4	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B4	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B4	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B4	24-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	24-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B4	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B4	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B4	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B4	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B4	26-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B4	16-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B4	13-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B5 (b)	09-Apr-96	<0.05	<0.05	<0.01	<0.05	<0.05	na	na	na	<0.5	na	<0.1	<0.1	<0.1	na	na	na
LF-B5 (b)	01-Aug-96	<0.03	<0.03	na	<0.03	<0.03	na	na	na	<0.3	na	<0.05	<0.05	<0.05	na	na	na
LF-B5 (b)	22-Nov-96	<0.03	<0.03	na	<0.03	<0.03	na	na	na	<0.3	na	<0.05	<0.05	<0.05	na	na	na
LF-B5 (b)	17-Mar-97	<0.03	<0.03	na	<0.03	<0.03	na	na	na	<0.3	na	<0.05	<0.05	<0.05	na	na	na
LF-B5 (b)	12-Jun-97	<0.03	<0.03	na	<0.03	<0.03	na	na	na	<0.3	na	<0.05	<0.05	<0.05	na	na	na
LF-B5 (b)	20-Aug-97	<0.05	<0.05	na	<0.05	<0.05	na	na	na	<0.5	na	<0.1	<0.1	<0.1	na	na	na
LF-B5 (b)	17-Dec-97	<0.05	<0.05	na	<0.05	<0.05	na	na	na	<0.5	na	<0.1	<0.1	<0.1	na	na	na
LF-B5 (b)	27-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	0.0018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-B5 (b)	09-Apr-98	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LF-B5 (b)	16-Jul-98	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.062	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
LF-B5 (b)	23-Oct-98	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.012	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
LF-B5 (b)	13-Jan-99	<0.002	<0.002	<0.002	<0.002	<0.002	0.0032	<0.002	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
LF-B5 (b)	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0036	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B5 (b)	15-Jul-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0039	<0.001	<0.001	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-B5 (b)	15-Oct-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0024	<0.001	<0.001	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
DUP	15-Oct-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0023	<0.001	<0.001	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-B5 (b)	21-Jan-00	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-B5 (b)	02-Feb-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B5 (b)	10-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B5 (b)	20-Jan-03	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.014	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0007	<0.0007
LF-B5 (b)	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0044	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0044	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B5 (b)	20-Jan-05	<0.002	<0.002	<0.002	<0.002	<0.002	0.0034	<0.002	<0.002	<0.04	<0.002	<0.002	<0.004	<0.004	<0.004	<0.002	<0.002
LF-B5 (b)	25-Jan-06	<0.002	<0.002	<0.002	<0.002	<0.002	0.0027	<0.002	<0.002	<0.04	<0.002	<0.002	<0.004	<0.004	<0.004	<0.002	<0.002

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-B4	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-B4	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
LF-B4	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
LF-B4	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-B4	18-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-B4	24-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	24-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-B4	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-B4	16-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-B4	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-B4	18-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	18-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-B4	26-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-B4	16-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-B4	13-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
LF-B5 (b)	09-Apr-96	na	na	<0.01	<0.05	na	na	<0.5	<0.01	na	na	<0.05
LF-B5 (b)	01-Aug-96	na	na	na	<0.03	na	na	<0.3	na	na	na	<0.03
LF-B5 (b)	22-Nov-96	na	na	na	<0.03	na	na	<0.3	na	na	na	<0.03
LF-B5 (b)	17-Mar-97	na	na	na	<0.03	na	na	<0.3	na	na	na	<0.03
LF-B5 (b)	12-Jun-97	na	na	na	<0.03	na	na	<0.3	na	na	na	<0.03
LF-B5 (b)	20-Aug-97	na	na	na	<0.05	na	na	<0.5	na	na	na	<0.05
LF-B5 (b)	17-Dec-97	na	na	na	<0.05	na	na	<0.5	na	na	na	<0.05
LF-B5 (b)	27-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0038	<0.001	<0.001
LF-B5 (b)	09-Apr-98	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	na	<0.01	<0.002	<0.01	<0.01
LF-B5 (b)	16-Jul-98	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	na	<0.012	<0.025	<0.012	<0.012
LF-B5 (b)	23-Oct-98	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	na	<0.0025	0.0064	<0.0025	<0.0025
LF-B5 (b)	13-Jan-99	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	na	<0.002	0.0069	<0.002	<0.002
LF-B5 (b)	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0063	<0.001	<0.001
LF-B5 (b)	15-Jul-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	0.0066	<0.001	<0.001
LF-B5 (b)	15-Oct-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	0.0061	<0.001	<0.001
DUP	15-Oct-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	0.0058	<0.001	<0.001
LF-B5 (b)	21-Jan-00	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.02	<0.001	0.0059	<0.001	<0.001
LF-B5 (b)	02-Feb-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0039	<0.0005	<0.0005
LF-B5 (b)	10-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0049	<0.0005	<0.0005
LF-B5 (b)	20-Jan-03	<0.0007	<0.0007	<0.0029	<0.0007	<0.0007	<0.0007	<0.014	<0.0007	0.0067	<0.0007	<0.0007
LF-B5 (b)	22-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0062	<0.0005	<0.0005
DUP	22-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0063	<0.0005	<0.0005
LF-B5 (b)	20-Jan-05	<0.002	<0.002	<0.008	<0.002	<0.002	<0.002	<0.04	<0.002	0.0055	<0.002	<0.002
LF-B5 (b)	25-Jan-06	<0.002	<0.002	<0.008	<0.002	<0.002	<0.002	<0.04	<0.002	0.0041	<0.002	<0.002

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
LF-B5 (b)	18-Apr-07	<0.0013	0.18	0.0008 J	<0.025	<0.025	<0.0013	<0.0013	<0.0013	0.003	<0.0013	<0.025	<0.0013	<0.0013	<0.0013	0.0015	<0.0013	<0.0026
LF-B5 (b)	15-Apr-08	<0.001	0.22	0.0006 J	<0.02	<0.02	<0.001	<0.001	<0.001	0.0024	<0.001	<0.02	<0.001	<0.001	<0.001	0.002	<0.001	<0.002
LF-B5 (b)	17-Apr-09	<0.001	0.14	0.0005 J	<0.02	<0.02	<0.001	<0.001	<0.001	0.0019	<0.001	<0.02	<0.001	<0.001	<0.001	0.0007 J	<0.001	<0.002
LF-B5 (b)	30-Apr-10	<0.001	0.18	0.0006 J	<0.02	<0.02	<0.001	<0.001	<0.001	0.0027	<0.001	<0.02	<0.001	<0.001	<0.001	0.0006 J	<0.001	<0.002
LF-B6	09-Apr-96	<0	<0.1	<0.1	<1	<2	<0.1	<0.1	<0.1	<0.1	0.29	<2	<0.1	0.29	<0.1	<0.1	<0.2	0.97
LF-B6	01-Aug-96	<0	0.03	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	0.11	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B6	25-Nov-96	<0	0.046	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
DUP	25-Nov-96	<0	0.047	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B6	17-Mar-97	<0	0.025	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B6	12-Jun-97	<0	0.041	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B6	19-Aug-97	<0	0.07	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B6	18-Dec-97	<0	0.067	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
LF-B6	27-Feb-98	<0	0.059	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
LF-B6	08-Apr-98	<0	0.072	<0.005	<0.025	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001
LF-B6	15-Jul-98	<0.0025	0.064	<0.0025	<0.012	<0.012	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.012	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
LF-B6	19-Oct-98	<0.05 UJ2	<0.083 UJ2	<0.05 UJ2	<0.25 UJ2	<0.35 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.25 UJ2	<0.05 UJ2	<0.09 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2
LF-B6	13-Jan-99	<0.001	0.085	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B6	21-Apr-99	<0.001	0.084	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B6	14-Jul-99	<0.0005	0.079	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B6	15-Oct-99	<0.0005	0.09	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B6	21-Jan-00	<0.0005	0.097	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B6	25-Jan-01	<0.0005	0.08	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	25-Jan-01	<0.0005	0.091	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B6	10-Apr-01	<0.0005	0.094	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B6	10-Jan-02	<0.0005	0.067	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B6	17-Jan-03	<0.0005	0.098 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B6	22-Jan-04	<0.0005	0.11	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B6	19-Jan-05	<0.0005	0.1	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
LF-B6	25-Jan-06	<0.0005	0.1	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	25-Jan-06	<0.0005	0.1	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
LF-B6	17-Apr-07	<0.0005	0.08	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0021	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
LF-B6	14-Apr-08	<0.0005	0.076	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0026	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.001
LF-B6	16-Apr-09	<0.0005	0.072	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0051	<0.0005	<0.01	<0.0005	<0.0005	0.0009	<0.0005	<0.0005	<0.001
LF-B6	26-Apr-10	<0.0005	0.068	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0031	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.001
MD-1 (c)	05-May-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	0.78	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	14-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	33	0.74	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	39	0.85	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	27-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	45	0.94	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	22-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	31	0.82	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
LF-B5 (b)	18-Apr-07	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0026	<0.0013	<0.0013	<0.025	<0.0013	<0.0013	<0.0025	<0.0025	<0.0025	<0.0013	<0.0013
LF-B5 (b)	15-Apr-08	<0.001	<0.001	<0.001	<0.001	<0.001	0.0023	<0.001	<0.001	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-B5 (b)	17-Apr-09	<0.001	<0.001	<0.001	<0.001	<0.001	0.0024	<0.001	<0.001	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-B5 (b)	30-Apr-10	<0.001	<0.001	<0.001	<0.001	<0.001	0.0021	<0.001	<0.001	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-B6	09-Apr-96	<0.1	<0.1	<0.01	<0.1	<0.1	na	na	na	<1	na	<0.2	<0.2	<0.2	na	na	na
LF-B6	01-Aug-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B6	25-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
DUP	25-Nov-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B6	17-Mar-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B6	12-Jun-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B6	19-Aug-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B6	18-Dec-97	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
LF-B6	27-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
LF-B6	08-Apr-98	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
LF-B6	15-Jul-98	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.012	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
LF-B6	19-Oct-98	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.25 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2
LF-B6	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B6	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LF-B6	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	21-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	10-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	25-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	25-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	14-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	16-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
LF-B6	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-1 (c)	05-May-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	14-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	27-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	22-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
LF-B5 (b)	18-Apr-07	<0.0013	<0.0013	<0.005	<0.0013	<0.0013	<0.0013	<0.025	<0.0013	0.004	<0.0013	<0.0013
LF-B5 (b)	15-Apr-08	<0.001	<0.001	<0.004	<0.001	<0.001	<0.001	<0.02	<0.001	0.0039	<0.001	<0.001
LF-B5 (b)	17-Apr-09	<0.001	<0.001	<0.004	<0.001	<0.001	<0.001	<0.02	<0.001	0.0038	<0.001	<0.001
LF-B5 (b)	30-Apr-10	<0.001	<0.001	<0.004	<0.001	<0.001	<0.001	<0.02	<0.001	0.0043	<0.001	<0.001
LF-B6	09-Apr-96	na	na	0.01	<0.1	na	na	<1	<0.01	na	na	<0.1
LF-B6	01-Aug-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B6	25-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
DUP	25-Nov-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B6	17-Mar-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B6	12-Jun-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B6	19-Aug-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B6	18-Dec-97	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
LF-B6	27-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.011	<0.001	<0.001
LF-B6	08-Apr-98	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	na	<0.005	<0.002	<0.005	<0.005
LF-B6	15-Jul-98	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	na	<0.0025	0.0087	<0.0025	<0.0025
LF-B6	19-Oct-98	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	<0.05 UJ2	na	<0.05 UJ2	<0.1 UJ2	<0.05 UJ2	<0.05 UJ2
LF-B6	13-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0089	<0.001	<0.001
LF-B6	21-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.01	<0.001	<0.001
LF-B6	14-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.01	<0.0005	<0.0005
LF-B6	15-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0098	<0.0005	<0.0005
LF-B6	21-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.01	<0.0005	<0.0005
LF-B6	25-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0077	<0.0005	<0.0005
DUP	25-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.008	<0.0005	<0.0005
LF-B6	10-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0072	<0.0005	<0.0005
LF-B6	10-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0056	<0.0005	<0.0005
LF-B6	17-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0075 J	<0.0005	<0.0005
LF-B6	22-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0085	<0.0005	<0.0005
LF-B6	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0072	<0.0005	<0.0005
LF-B6	25-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0061	<0.0005	<0.0005
DUP	25-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0061	<0.0005	<0.0005
LF-B6	17-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0059	<0.0005	<0.0005
LF-B6	14-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0051	<0.0005	<0.0005
LF-B6	16-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0052	<0.0005	<0.0005
LF-B6	26-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.004	<0.0005	<0.0005
MD-1 (c)	05-May-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	14-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	27-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	22-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
MD-1 (c)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	34	0.91	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	15-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	6.7	0.28	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	14	0.57	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	12-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	16	0.97	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	12-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	11	0.86	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	22-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	8.2	0.85	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	22-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	2.5	0.670	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	24-Apr-09	na/ND	na/ND	na/ND	na/ND	na/ND	1.9	0.470	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	21-Oct-09	<0.017	<0.017	<0.017	<0.33	<0.330	2.3	0.54	<0.017	<0.017	<0.017	<0.330	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
MD-1 (c)	29-Apr-10	<0.0063	<0.0063	<0.0063	<0.13	<0.130	0.95	0.39	<0.0063	<0.0063	<0.0063	<0.130	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063
MD-1 (c)	27-Oct-10	<0.0025	<0.0025	<0.0025	<0.050	<0.050	0.45	0.27	<0.0025	<0.0025	<0.0025	<0.050	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
MD-1 (c)	14-Nov-11	<0.0025	<0.0025	<0.0025	<0.050	<0.050	1.2	0.28	<0.0025	<0.0025	<0.0025	<0.050	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
MD-1 (c)	17-Oct-12	<0.005	<0.005	<0.005	<0.0010	<0.100	0.57	0.18	<0.005	<0.005	<0.005	<0.100	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MD-1 (c)	08-Oct-13	<0.0036	<0.0036	<0.0036	<0.071	<0.071	0.79	0.26	<0.0036	<0.0036	<0.0036	<0.071	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036
MD-1 (c)	27-Oct-14	<0.0017	<0.0017	<0.0017	<0.033	<0.033	0.2	0.27	<0.0017	<0.0017	<0.0017	<0.033	<0.0017	0.002	<0.0017	<0.0017	<0.0017	<0.0017
MD-2 (c)	05-May-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	14-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	0.011	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	27-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	0.0022	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	22-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	15-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	12-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	12-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	22-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	22-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	24-Apr-09	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	21-Oct-09	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-2 (c)	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
DUP	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-2 (c)	27-Oct-10	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-2 (c)	14-Nov-11	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-2 (c)	17-Oct-12	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-2 (c)	08-Oct-13	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
DUP	08-Oct-13	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-2 (c)	27-Oct-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
DUP	27-Oct-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	05-May-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	0.0024	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgLl)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
MD-1 (c)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	15-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	12-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	12-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	22-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	22-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.020	<0.020	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	0.044	na/ND
MD-1 (c)	24-Apr-09	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.020	<0.017	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	0.028	na/ND
MD-1 (c)	21-Oct-09	<0.017	<0.017	<0.0017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.330	<0.017	<0.017	<0.033	<0.033	<0.033	0.034	<0.017
MD-1 (c)	29-Apr-10	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.130	<0.0063	<0.0063	<0.013	<0.013	<0.013	0.026	<0.0063
MD-1 (c)	27-Oct-10	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.050	<0.0025	<0.0025	<0.005	<0.005	<0.005	0.02	<0.0025
MD-1 (c)	14-Nov-11	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.050	<0.0025	<0.0025	<0.005	<0.005	<0.005	0.018	<0.0025
MD-1 (c)	17-Oct-12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.100	<0.005	<0.005	<0.010	<0.010	<0.010	0.011	<0.005
MD-1 (c)	08-Oct-13	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.071	<0.0036	<0.0036	<0.0071	<0.0071	<0.0071	0.016	<0.0036
MD-1 (c)	27-Oct-14	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	0.017	<0.0017
MD-2 (c)	05-May-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	14-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	27-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	22-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	15-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	12-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	12-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	22-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	22-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	24-Apr-09	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	21-Oct-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-2 (c)	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-2 (c)	27-Oct-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-2 (c)	14-Nov-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-2 (c)	17-Oct-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-2 (c)	08-Oct-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	08-Oct-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-2 (c)	27-Oct-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	27-Oct-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-3 (c)	05-May-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
MD-1 (c)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	15-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	12-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	12-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	22-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	22-Oct-08	na/ND	0.049	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	24-Apr-09	na/ND	0.030	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-1 (c)	21-Oct-09	<0.017	0.036	<0.067	<0.017	<0.017	<0.017	<0.330	<0.017	<0.017	<0.017	<0.017
MD-1 (c)	29-Apr-10	<0.0063	0.024	<0.0025	<0.0063	<0.0063	<0.0063	<0.130	<0.0063	<0.0063	<0.0063	<0.0063
MD-1 (c)	27-Oct-10	<0.0025	0.021	<0.001	<0.0025	<0.0025	<0.0025	<0.050	<0.0025	<0.0025	<0.0025	<0.0025
MD-1 (c)	14-Nov-11	<0.0025	0.019	<0.001	<0.0025	<0.0025	<0.0025	<0.050	<0.0025	<0.0025	<0.0025	<0.0025
MD-1 (c)	17-Oct-12	<0.005	0.012	<0.0020	<0.005	<0.005	<0.005	<0.100	<0.005	<0.005	<0.005	<0.005
MD-1 (c)	08-Oct-13	<0.0036	0.018	<0.014	<0.0036	<0.0036	<0.0036	<0.071	<0.0036	<0.0036	<0.0036	<0.0036
MD-1 (c)	27-Oct-14	<0.0017	0.017	<0.0067	<0.0017	0.0019	<0.0017	<0.033	<0.0017	0.0018	<0.0017	<0.0017
MD-2 (c)	05-May-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	14-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	27-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	22-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	15-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	12-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	12-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	22-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	22-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	24-Apr-09	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-2 (c)	21-Oct-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-2 (c)	29-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
DUP	29-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-2 (c)	27-Oct-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-2 (c)	14-Nov-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-2 (c)	17-Oct-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-2 (c)	08-Oct-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	08-Oct-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MD-2 (c)	27-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	27-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	05-May-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
MD-3 (c)	14-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	27-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	22-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	15-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	0.0009	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	12-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	12-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	22-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	22-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	0.0012	na/ND	na/ND	na/ND	0.002
MD-3 (c)	24-Apr-09	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	0.0012	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	21-Oct-09	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	27-Oct-10	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	14-Nov-11	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	17-Oct-12	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	07-Oct-13	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	27-Oct-14	<0.0005	<0.0005	<0.0005	<0.01	0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-4 (c)	05-May-03	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MD-4 (c)	14-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	27-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	22-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	15-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	12-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	12-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	22-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	22-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	24-Apr-09	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	21-Oct-09	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-4 (c)	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-4 (c)	27-Oct-10	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
DUP	27-Oct-10	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-4 (c)	14-Nov-11	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-4 (c)	17-Oct-12	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-4 (c)	08-Oct-13	<0.0005	<0.0005	<0.0005	<0.01	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgLl)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
MD-3 (c)	14-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	27-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	22-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	15-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	12-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	12-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	22-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	22-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	0.0005	0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	24-Apr-09	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	21-Oct-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-3 (c)	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-3 (c)	27-Oct-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	0.0092	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-3 (c)	14-Nov-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-3 (c)	17-Oct-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-3 (c)	07-Oct-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-3 (c)	27-Oct-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-4 (c)	05-May-03	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MD-4 (c)	14-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	27-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	22-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	15-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	12-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	12-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	22-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	22-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	24-Apr-09	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	21-Oct-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-4 (c)	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-4 (c)	27-Oct-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	27-Oct-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-4 (c)	14-Nov-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-4 (c)	17-Oct-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-4 (c)	08-Oct-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
MD-3 (c)	14-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	27-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	22-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	15-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	12-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	12-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	22-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	22-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	24-Apr-09	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-3 (c)	21-Oct-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	29-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	27-Oct-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	14-Nov-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	17-Oct-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	07-Oct-13	na	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MD-3 (c)	27-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MD-4 (c)	05-May-03	na	na	na	na	na	na	na	na	na	na	na
MD-4 (c)	14-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	27-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	22-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	15-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	12-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	12-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	22-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	22-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	24-Apr-09	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-4 (c)	21-Oct-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-4 (c)	29-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-4 (c)	27-Oct-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
DUP	27-Oct-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-4 (c)	14-Nov-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-4 (c)	17-Oct-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MD-4 (c)	08-Oct-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
MD-4 (c)	27-Oct-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-5 (d)	05-May-03	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-5 (d)	13-Oct-03	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-5 (d)	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
DUP	20-Jan-04	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
MD-5 (d)	21-Apr-04	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-5 (d)	21-Oct-04	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-5 (d)	29-Mar-05	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
MD-5 (d)	21-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
MD-5 (d)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-5 (d)	13-Apr-06	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
MD-5 (d)	26-Oct-06	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
MD-5 (d)	16-Apr-07	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
MD-5 (d)	11-Oct-07	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
MD-5 (d)	23-Apr-08	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
MD-5 (d)	23-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
DUP	23-Oct-08	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
MD-5 (d)	24-Apr-09	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na/ND	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na
MD-5 (d)	21-Oct-09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MD-5 (d)	29-Apr-10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MD-5 (d)	27-Oct-10	na	na	na	na	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-5 (d)	19-Apr-11	na	na	na	na	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
DUP	19-Apr-11	na	na	na	na	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-5 (d)	14-Nov-11	na	na	na	na	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-5 (d)	17-Oct-12	na	na	na	na	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-5 (d)	08-Oct-13	na	na	na	na	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MD-5 (d)	27-Oct-14	na	na	na	na	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
DUP	27-Oct-14	na	na	na	na	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	na	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MW-1	16-Dec-94	na	<0.0009	0.032	0.0028	<0.0042	0.016	na	0.001	na	<0.0005	<0.0011	na	0.0027	<0.0011	0.0028	0.0022	0.0031
MW-1	29-Mar-95	<0	0.017	0.068	<0.002	<0.005	0.028	0.0017	0.002	na	0.0093	0.013	<0	0.0013	0.0013	0.0065	0.005	0.0025
MW-1	08-Jun-95	<0	0.024	0.089	<0	<0	0.037	0.0022	0.0026	na	0.003	0.025	0.0013	0.0016	<0	0.01	0.009	0.0023
MW-1	09-Jan-96	<0	0.052	0.13	<0.05	<0.1	0.065	<0.005	<0.005	0.012	0.002	<0.1	<0.005	0.003	<0.005	<0.005	0.015	0.006
MW-1	17-Apr-96	na	na	na	na	na	0.065	na	na	na	0.0055	na	na	0.0035	na	na	na	0.007
MW-1	31-Jul-96	na	na	na	na	na	0.053	na	na	na	0.012	na	na	0.0098	na	na	na	0.014
MW-1	19-Nov-96	na	na	na	na	na	0.032	na	na	na	0.0017	na	na	0.0017	na	na	na	0.005
MW-1	25-Mar-97	na	na	na	na	na	0.049	na	na	na	0.0024	na	na	0.0022	na	na	na	0.005
MW-1	10-Jun-97	na	na	na	na	na	0.032	na	na	na	0.0007	na	na	0.0009	na	na	na	0.003
MW-1	18-Aug-97	na	na	na	na	na	0.033	na	na	na	0.0014	na	na	0.0015	na	na	na	0.004
MW-1	19-Dec-97	na	na	na	na	na	0.083	na	na	na	0.0038	na	na	0.0078	na	na	na	0.011

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgLl)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
MD-4 (c)	27-Oct-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MD-5 (d)	05-May-03	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	na	na/ND	<0.0005	na/ND
MD-5 (d)	13-Oct-03	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	na	na/ND	<0.0005	na/ND
MD-5 (d)	20-Jan-04	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
DUP	20-Jan-04	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
MD-5 (d)	21-Apr-04	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
MD-5 (d)	21-Oct-04	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
MD-5 (d)	29-Mar-05	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
MD-5 (d)	21-Sep-05	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
MD-5 (d)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-5 (d)	13-Apr-06	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
MD-5 (d)	26-Oct-06	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
MD-5 (d)	16-Apr-07	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
MD-5 (d)	11-Oct-07	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
MD-5 (d)	23-Apr-08	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
MD-5 (d)	23-Oct-08	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
DUP	23-Oct-08	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
MD-5 (d)	24-Apr-09	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	<0.0005	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005	na/ND
MD-5 (d)	21-Oct-09	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MD-5 (d)	29-Apr-10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MD-5 (d)	27-Oct-10	<0.0005	na	na	na	na	na	<0.0005	<0.0005	na	na	na	na	<0.0005	na	<0.0005	na
MD-5 (d)	19-Apr-11	<0.0005	na	na	na	na	na	<0.0005	<0.0005	na	na	na	na	<0.0005	na	<0.0005	na
DUP	19-Apr-11	<0.0005	na	na	na	na	na	<0.0005	<0.0005	na	na	na	na	<0.0005	na	<0.0005	na
MD-5 (d)	14-Nov-11	<0.0005	na	na	na	na	na	<0.0005	<0.0005	na	na	na	na	<0.0005	na	<0.0005	na
MD-5 (d)	17-Oct-12	<0.0005	na	na	na	na	na	<0.0005	<0.0005	na	na	na	na	<0.0005	na	<0.0005	na
MD-5 (d)	08-Oct-13	na	na	na	na	na	na	<0.0005	<0.0005	<0.01	na	na	na	<0.0005	na	<0.0005	na
MD-5 (d)	27-Oct-14	na	na	na	na	na	na	<0.0005	<0.0005	na	na	na	na	<0.0005	na	<0.0005	na
DUP	27-Oct-14	na	na	na	na	na	na	<0.0005	<0.0005	na	na	na	na	<0.0005	na	<0.0005	na
MW-1	16-Dec-94	na	na	na	na	<0.0008	na	na	na	<0.0014	na	<0.0012	na	na	na	na	na
MW-1	29-Mar-95	<0	<0	na	<0	<0	na	na	na	<0.002	na	0.0053	na	na	na	na	na
MW-1	08-Jun-95	0.0006	<0	na	0.0028	<0	na	na	na	<0	na	<0	na	na	na	na	na
MW-1	09-Jan-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
MW-1	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-1	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-1	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-1	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-1	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-1	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-1	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
MD-4 (c)	27-Oct-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MD-5 (d)	05-May-03	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na	na/ND	na
MD-5 (d)	13-Oct-03	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	na
MD-5 (d)	20-Jan-04	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.001	na/ND	<0.0005
DUP	20-Jan-04	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.001	na/ND	<0.0005
MD-5 (d)	21-Apr-04	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.001	na/ND	na
MD-5 (d)	21-Oct-04	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.001	na/ND	na
MD-5 (d)	29-Mar-05	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005
MD-5 (d)	21-Sep-05	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na	na/ND	<0.0005
MD-5 (d)	30-Sep-05	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND
MD-5 (d)	13-Apr-06	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005
MD-5 (d)	26-Oct-06	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005
MD-5 (d)	16-Apr-07	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005
MD-5 (d)	11-Oct-07	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	na	na/ND	<0.0005
MD-5 (d)	23-Apr-08	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005
MD-5 (d)	23-Oct-08	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005
DUP	23-Oct-08	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005
MD-5 (d)	24-Apr-09	na/ND	<0.0005	na/ND	na/ND	na/ND	na/ND	na/ND	na/ND	<0.0005	na/ND	<0.0005
MD-5 (d)	21-Oct-09	na	na	na	na	na	na	na	na	na	na	na
MD-5 (d)	29-Apr-10	na	na	na	na	na	na	na	na	na	na	na
MD-5 (d)	27-Oct-10	<0.0005	<0.0005	na	na	na	na	na	na	<0.0005	na	na
MD-5 (d)	19-Apr-11	<0.0005	<0.0005	na	na	na	na	na	na	<0.0005	na	na
DUP	19-Apr-11	<0.0005	<0.0005	na	na	na	na	na	na	<0.0005	na	na
MD-5 (d)	14-Nov-11	<0.0005	<0.0005	na	na	na	na	na	na	<0.0005	na	na
MD-5 (d)	17-Oct-12	<0.0005	<0.0005	na	na	na	na	na	na	<0.0005	na	na
MD-5 (d)	08-Oct-13	<0.0005	<0.0005	na	na	na	na	na	na	<0.0005	na	na
MD-5 (d)	27-Oct-14	<0.0005	<0.0005	na	na	na	na	na	na	<0.0005	na	<0.0005
DUP	27-Oct-14	<0.0005	<0.0005	na	na	na	na	na	na	<0.0005	na	<0.0005
MW-1	16-Dec-94	na	na	na	na	na	na	na	na	na	na	na
MW-1	29-Mar-95	na	na	na	na	na	na	na	na	na	na	na
MW-1	08-Jun-95	na	na	na	na	na	na	na	na	na	na	na
MW-1	09-Jan-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
MW-1	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na
MW-1	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na
MW-1	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na
MW-1	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na
MW-1	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na
MW-1	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na
MW-1	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
MW-1	26-Feb-98	<0	0.041	0.17	<0.02	<0.02	0.056	0.0036	0.0033	0.0087	0.0024	<0.02	<0.001	0.0032	0.0014	0.013	0.0077	0.0053
MW-1	08-Apr-98	<0	0.046	0.15	<0.025	<0.025	0.053	<0.005	<0.005	0.011	<0.005	<0.025	<0.005	<0.005	<0.005	0.014	0.013	<0.001
DUP	08-Apr-98	<0	0.043	0.13	<0.025	<0.025	0.049	<0.005	<0.005	0.0099	<0.005	<0.025	<0.005	<0.005	<0.005	0.013	0.011	<0.001
MW-1	14-Jul-98	<0.005	0.045	0.14	<0.025	<0.025	0.06	<0.005	<0.005	0.0095	<0.005	<0.025	<0.005	<0.005	<0.005	0.012	0.014	<0.005
MW-1	21-Oct-98	<0.01	0.052	0.15	<0.05	<0.05	0.062	<0.01	<0.01	0.01	<0.01	<0.05	<0.01	<0.01	<0.01	0.014	0.015	<0.01
MW-1	12-Jan-99	<0.001	0.055	0.17	<0.005	<0.005	0.073	0.0046	0.0033	0.011	0.0019	<0.005	0.0006 J11	0.011	0.0015	0.017	0.017	0.0053
MW-1	20-Apr-99	<0.001	0.051	0.14	<0.005	<0.005	0.067	0.0042	0.0031	0.0092	0.002	<0.005	0.0006 J11	<0.001	0.0012	0.015	0.013	0.005
MW-1	13-Jul-99	<0.0005	0.044	0.093	<0.01	<0.01	0.055	0.0036	0.0024	0.0072	0.0014	<0.01	<0.0005	0.0077	0.0009	0.013	0.016	0.004
MW-1	11-Oct-99	<0.0005	0.04	0.11	<0.01	<0.01	0.053	0.0035	0.0025	0.0073	0.0013	<0.01	0.0013	0.0074	0.0009	0.013	0.013	0.0037
MW-1	18-Jan-00	<0.0005	0.025	0.061	<0.01	<0.01	0.043	0.0028	0.0015	0.0065	0.0013	<0.01	<0.0005	0.0046	0.0008	0.0095	0.01	0.0034
DUP	24-Jan-01	<0.0005	0.033	0.1	<0.01	<0.01	0.051	0.0038	0.0019	0.0066	0.0015	<0.01	0.0005	<0.0005	0.0006	0.012	0.0098	0.0045
MW-1	16-Jan-03	<0.0005	0.032	0.12	<0.01	<0.01	0.032	0.0022	0.0017	0.0033	0.0008	0.038	<0.0005	0.008	<0.0005	0.0087	0.0067	0.0027
MW-1	26-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
MW-2	16-Dec-94	na	<0.0009	0.0047	<0.0018	<0.0042	0.017	na	<0.0008	na	<0.0005	<0.0011	na	0.0019	<0.0011	0.0018	<0.0014	0.0012
MW-2	29-Mar-95	<0	<0.0009	0.0022	<0.002	<0.005	0.016	<0.0006	<0.0008	na	<0.0004	<0.002	<0	0.0011	<0.002	0.0009	<0.002	0.0009
MW-2	08-Jun-95	<0	0.0025	<0	<0	<0	0.022	<0	<0	na	0.0005	<0	<0	0.0009	<0	0.0049	0.0022	0.0009
MW-2	09-Jan-96	<0	0.007	0.02	<0.05	<0.1	0.051	<0.005	<0.005	0.023	0.0009	<0.1	<0.005	0.001	0.008	<0.005	<0.01	0.002
MW-2	17-Apr-96	na	na	na	na	na	0.032	na	na	na	0.0008	na	na	0.0013	na	na	na	<0.002
MW-2	31-Jul-96	na	na	na	na	na	0.042	na	na	na	0.0009	na	na	0.0016	na	na	na	<0.002
MW-2	19-Nov-96	na	na	na	na	na	0.018	na	na	na	0.0007	na	na	0.0017	na	na	na	0.004
MW-2	25-Mar-97	na	na	na	na	na	0.024	na	na	na	0.001	na	na	0.0007	na	na	na	<0.002
MW-2	10-Jun-97	na	na	na	na	na	0.027	na	na	na	<0.0005	na	na	0.0005	na	na	na	0.002
MW-2	18-Aug-97	na	na	na	na	na	0.033	na	na	na	<0.0005	na	na	0.0008	na	na	na	<0.002
MW-2	19-Dec-97	na	na	na	na	na	0.019	na	na	na	0.0021	na	na	0.0019	na	na	na	0.006
MW-2	26-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	0.014	<0.001	<0.001	0.0064	<0.001	<0.02	<0.001	<0.001	0.0037	0.0027	<0.002	<0.002
MW-2	08-Apr-98	<0	0.0012	0.0018	<0.005	<0.005	0.016	0.001	<0.001	0.0069	<0.001	<0.005	<0.001	<0.001	0.0022	0.0025	0.0017	<0.001
MW-2	14-Jul-98	<0.001	0.0043	0.0095	<0.005	<0.005	0.036	0.0025	<0.001	0.024	<0.001	<0.005	<0.001	<0.001	0.0083	0.0095	0.005	<0.001
MW-2	21-Oct-98	<0.002	0.0039	0.0067	<0.01	<0.01	0.037	0.0032	<0.002	0.026	<0.002	<0.01	<0.002	<0.002	0.01	0.012	0.0055	<0.002
DUP	21-Oct-98	<0.002	0.004	0.0074	<0.01	<0.01	0.037	0.0031	<0.002	0.027	<0.002	<0.01	<0.002	<0.002	0.01	0.012	0.0056	<0.002
MW-2	12-Jan-99	<0.001	0.0015	0.0033	<0.005	<0.005	0.032	0.0025	<0.001	0.019	<0.001	<0.005	<0.001	<0.001	0.0077	0.0083	0.0047	<0.001
MW-2	24-Jan-01	<0.0005	0.0016	0.0041	<0.01	<0.01	0.028	0.0026	<0.0005	0.014	<0.0005	<0.01	<0.0005	0.0008	0.0054	0.0072	0.0038	<0.001
MW-2	08-Jan-02	<0.0005	0.002	0.0047	<0.01	<0.01	0.019	0.0017	<0.0005	0.0069	<0.0005	0.026	<0.0005	0.0007	0.0028	0.0046	0.0026	<0.001
MW-2	16-Jan-03	<0.0005	0.0017	0.0019	<0.01	<0.01	0.027	0.0022	<0.0005	0.012	<0.0005	0.041	<0.0005	<0.0005	0.0042	0.0089	0.0032	<0.001
MW-2	20-Jan-04	<0.0005	0.0032	0.0038	<0.01	<0.01	0.03	0.0031	<0.0005	0.012	<0.0005	<0.01	<0.0005	0.0006	0.0038	0.01	0.0041	<0.001
MW-2	18-Jan-05	<0.001	0.01	0.12	<0.02	<0.02	0.014	0.0007 J	0.0012	0.001	<0.001	<0.02	0.0006 J	<0.001	<0.001	0.007	0.0027	0.0006 J
MW-2	25-Jan-06	<0.0005	0.0021	0.0008	<0.01	<0.01	0.026	0.0029	<0.0005	0.012	0.0003 J	<0.01	<0.0005	0.0004 J	0.0034	0.009	0.0027	0.0004 J
MW-2	16-Apr-07	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	0.021	0.0025	<0.0005	0.0068	<0.0005	<0.01	<0.0005	0.0005 J	0.0023	0.0036	0.0015	0.0004 J
MW-2	17-Apr-08	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	0.016	0.0022	<0.0005	0.0065	<0.0005	<0.01	<0.0005	0.0004 J	0.0023	0.0029	0.0016	<0.001
MW-2	17-Apr-09	<0.0005	0.0004 J	0.0005 J	<0.01	<0.01	0.015	0.0027	<0.0005	0.0083	<0.0005	<0.01	<0.0005	0.0004 J	0.0025	0.0042	0.0013	0.0003 J

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-pentanone	Bromobenzene	Carbon Disulfide	Chloroethane	Chloromethane	Dichlorodifluoromethane	Isopropylbenzene	n-Butylbenzene
MW-1	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	0.01	<0.001	<0.001	<0.001	0.0034	<0.001	<0.002	0.0021	<0.002	0.0044	<0.001
MW-1	08-Apr-98	<0.005	<0.005	<0.005	<0.005	<0.005	0.0086	<0.005	<0.005	<0.025	0.005	<0.005	<0.005	<0.005	<0.005	0.0058	<0.005
DUP	08-Apr-98	<0.005	<0.005	<0.005	<0.005	<0.005	0.0099	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-1	14-Jul-98	<0.005	<0.005	<0.005	<0.005	<0.005	0.0092	<0.005	<0.005	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-1	21-Oct-98	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MW-1	12-Jan-99	0.0011	<0.001	<0.001	<0.001	<0.001	0.01	<0.001	<0.001	<0.005	0.0059	<0.001	0.001	<0.001	<0.001	0.0029	0.0005 J11
MW-1	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.009	<0.001	<0.001	<0.005	0.0053	<0.001	<0.001	<0.001	<0.001	0.0033	0.0006 J11
MW-1	13-Jul-99	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	0.0066	<0.0005	<0.0005	<0.01	0.0044	<0.0005	<0.001	<0.001	<0.001	0.0028	0.0006
MW-1	11-Oct-99	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	0.0073	<0.0005	<0.0005	<0.01	0.0041	<0.0005	<0.001	<0.001	<0.001	0.0023	<0.0012
MW-1	18-Jan-00	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	0.0031	<0.0005	<0.0005	<0.01	0.0035	<0.0005	<0.001	<0.001	<0.001	0.0061	0.0007
DUP	24-Jan-01	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0047	<0.0005	<0.001	<0.001	<0.001	0.0042	<0.0005
MW-1	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0069	<0.0005	<0.0005	<0.01	0.0021	<0.0005	<0.001	<0.001	<0.001	0.0037	0.0008
MW-1	26-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-2	16-Dec-94	na	na	na	na	<0.0008	na	na	na	<0.0014	na	<0.0012	na	na	na	na	na
MW-2	29-Mar-95	<0	<0	na	<0	<0	na	na	na	<0.002	na	<0.002	na	na	na	na	na
MW-2	08-Jun-95	<0	<0	na	<0	<0	na	na	na	<0	na	<0	na	na	na	na	na
MW-2	09-Jan-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
MW-2	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-2	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-2	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-2	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-2	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-2	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-2	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-2	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	0.003	<0.001
MW-2	08-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0036	<0.001
MW-2	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0011	<0.001	<0.001	<0.001	<0.001	0.0027	<0.001
MW-2	21-Oct-98	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	0.0022	<0.002
DUP	21-Oct-98	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	0.0021	<0.002
MW-2	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0009 J11	<0.001	<0.001	<0.001	<0.001	0.0026	<0.001
MW-2	24-Jan-01	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.001	<0.0005	<0.001	<0.001	<0.001	0.0024	<0.0005
MW-2	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0008	<0.0005	<0.001	<0.001	<0.001	0.0022	<0.0005
MW-2	16-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0012	<0.0005	<0.001	<0.001	<0.001	0.0018	<0.0005
MW-2	20-Jan-04	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0018	<0.0005	<0.001	<0.001	<0.001	0.0019	<0.0005
MW-2	18-Jan-05	<0.001	<0.001	<0.001	<0.001	<0.001	0.012	<0.001	<0.001	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
MW-2	25-Jan-06	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0016	<0.0005	<0.001	<0.001	<0.001	0.0016	0.0005
MW-2	16-Apr-07	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0011	<0.0005	<0.001	<0.001	<0.001	0.0027	0.0004 J
MW-2	17-Apr-08	0.0005 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0009	<0.0005	<0.001	<0.001	<0.001	0.0021	0.0006
MW-2	17-Apr-09	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0015	<0.0005	<0.001	<0.001	<0.001	0.0023	0.0008

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
MW-1	26-Feb-98	0.021	0.0049	<0.005	<0.001	<0.001	0.021	<0.001	<0.001	<0.002	<0.001	<0.001
MW-1	08-Apr-98	<0.005	0.0087	<0.005	<0.005	<0.005	0.02	na	<0.005	<0.002	<0.005	<0.005
DUP	08-Apr-98	<0.005	0.0065	<0.005	<0.005	<0.005	0.018	na	<0.005	<0.002	<0.005	<0.005
MW-1	14-Jul-98	<0.005	<0.005	<0.005	<0.005	<0.005	0.019	na	<0.005	<0.01	<0.005	<0.005
MW-1	21-Oct-98	<0.01	<0.01	<0.01	<0.01	<0.01	0.019	na	<0.01	<0.02	<0.01	<0.01
MW-1	12-Jan-99	<0.001	0.0006 J11	<0.001	<0.001	<0.001	0.025	na	<0.001	<0.002	<0.001	<0.001
MW-1	20-Apr-99	<0.001	0.0014	<0.001	<0.001	<0.001	0.024	na	<0.001	<0.002	<0.001	<0.001
MW-1	13-Jul-99	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	0.02	<0.01	<0.0005	0.0019	<0.0005	<0.0005
MW-1	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	0.021	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-1	18-Jan-00	<0.0005	0.0077	<0.001	<0.0005	0.0005	0.021	<0.01	<0.0005	0.0015	<0.0005	<0.0005
DUP	24-Jan-01	<0.0005	0.0028	<0.001	<0.0005	<0.0005	0.023	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-1	16-Jan-03	<0.0005	0.0061	<0.002	<0.0005	0.0007	0.014	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-1	26-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-2	16-Dec-94	na	na	na	na	na	na	na	na	na	na	na
MW-2	29-Mar-95	na	na	na	na	na	na	na	na	na	na	na
MW-2	08-Jun-95	na	na	na	na	na	na	na	na	na	na	na
MW-2	09-Jan-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
MW-2	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na
MW-2	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na
MW-2	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na
MW-2	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na
MW-2	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na
MW-2	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na
MW-2	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na
MW-2	26-Feb-98	0.002	0.0014	<0.005	<0.001	0.0012	0.002	<0.001	<0.001	<0.002	<0.001	<0.001
MW-2	08-Apr-98	<0.001	0.0012	<0.001	<0.001	0.0013	0.0018	na	<0.001	<0.002	<0.001	<0.001
MW-2	14-Jul-98	<0.001	<0.001	<0.001	<0.001	0.0011	0.004	na	<0.001	0.0053	<0.001	<0.001
MW-2	21-Oct-98	<0.002	<0.002	<0.002	<0.002	<0.002	0.0046	na	<0.002	<0.004	<0.002	<0.002
DUP	21-Oct-98	<0.002	<0.002	<0.002	<0.002	<0.002	0.0044	na	<0.002	<0.004	<0.002	<0.002
MW-2	12-Jan-99	<0.001	<0.001	<0.001	<0.001	0.0008 J11	0.0038	na	<0.001	0.0042	<0.001	<0.001
MW-2	24-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	0.0006	0.0043	<0.01	<0.0005	0.0028	<0.0005	<0.0005
MW-2	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	0.0006	0.0032	<0.01	<0.0005	0.0018	<0.0005	<0.0005
MW-2	16-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	0.0005	0.0047	<0.01	<0.0005	0.0027	<0.0005	<0.0005
MW-2	20-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0061	<0.01	<0.0005	0.003	<0.0005	<0.0005
MW-2	18-Jan-05	<0.001	<0.001	<0.004	<0.001	<0.001	0.0058	<0.02	<0.001	<0.001	<0.001	<0.001
MW-2	25-Jan-06	<0.0005	0.0003 J	<0.002	<0.0005	0.0004 J	0.0051	<0.01	<0.0005	0.0029	<0.0005	<0.0005
MW-2	16-Apr-07	<0.0005	0.0003 J	<0.002	<0.0005	0.001	0.0045	<0.01	<0.0005	0.0031	<0.0005	<0.0005
MW-2	17-Apr-08	<0.0005	0.0003 J	<0.002	<0.0005	0.0009	0.0039	<0.01	<0.0005	0.0028	0.0006	<0.0005
MW-2	17-Apr-09	<0.0005	0.0003 J	<0.002	<0.0005	0.0009	0.0054	<0.01	<0.0005	0.0029	0.0007	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
MW-2	29-Apr-10	<0.0005	0.0004 J	0.0004 J	<0.01	<0.01	0.011	0.0029	<0.0005	0.011	<0.0005	<0.01	<0.0005	0.0003 J	0.0028	0.0051	0.0014	0.0003 J
MW-3	16-Dec-94	na	<0.0009	<0.0022	<0.0018	<0.0042	<0.0008	na	<0.0008	na	<0.0005	<0.0011	na	<0.0005	0.0028	<0.0008	<0.0014	<0.0005
MW-3	29-Mar-95	<0	<0.0009	<0.003	<0.002	<0.005	<0.0008	<0.0006	<0.0008	na	<0.0004	<0.002	<0	<0.0004	<0.002	<0.0008	<0.002	<0.0004
MW-3	08-Jun-95	<0	0.0019	<0	<0	<0	<0	<0	<0	na	<0	0.0052	<0	<0	0.011	0.0011	0.0007	<0
MW-3	09-Jan-96	<0	0.01	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	0.037	<0.005	<0.1	<0.005	<0.005	0.029	0.006	<0.01	<0.01
MW-3	17-Apr-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
MW-3	31-Jul-96	na	na	na	na	na	<0.005	na	na	na	<0.005	na	na	<0.005	na	na	na	<0.02
MW-3	19-Nov-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	0.0006	na	na	na	0.004
MW-3	25-Mar-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
MW-3	10-Jun-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
MW-3	18-Aug-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
MW-3	19-Dec-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
MW-3	26-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0099	<0.001	<0.02	<0.001	<0.001	0.0084	<0.001	<0.002	<0.002
MW-3	07-Apr-98	<0	0.0037	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.018	<0.001	<0.005	<0.001	<0.001	0.013	0.0014	<0.001	<0.001
MW-3	14-Jul-98	<0.001	0.0046	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.022	<0.001	<0.005	<0.001	<0.001	0.016	0.0016	<0.001	<0.001
DUP	14-Jul-98	<0.001	0.0041	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.022	<0.001	<0.005	<0.001	<0.001	0.015	0.0013	0.0014	<0.001
MW-3	20-Oct-98	<0.001	0.0044	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.024	<0.001	<0.005	<0.001	<0.001	0.017	0.0014	0.002	<0.001
MW-3	11-Jan-99	<0.001	0.0042	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.025	<0.001	<0.005	<0.001	<0.001	0.019	0.0023	0.0012	<0.001
DUP	11-Jan-99	<0.001	0.0042	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.025	<0.001	<0.005	<0.001	<0.001	0.019	0.0022	0.0013	<0.001
MW-3	19-Apr-99	<0.001	0.0009 J11	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.01	<0.001	<0.005	<0.001	<0.001	0.0078	0.0005 J11	<0.001	<0.001
MW-3	13-Jul-99	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0078	<0.0005	<0.01	<0.0005	<0.0005	0.0063	<0.0005	<0.0005	<0.001
MW-3	11-Oct-99	<0.0005	0.0026	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.024	<0.0005	<0.01	<0.0005	<0.0005	0.019	0.0019	0.0019	<0.001
MW-3	17-Jan-00	<0.0005	0.0039	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.028	<0.0005	<0.01	<0.0005	<0.0005	0.02	0.0031	0.0011	<0.001
MW-3	28-Apr-00	<0.0005	0.0025	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.021	<0.0005	<0.01	<0.0005	<0.0005	0.015	0.002	0.0011	<0.001
MW-3	25-Jul-00	<0.0005	0.0052	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.038	<0.0005	<0.01	<0.0005	<0.0005	0.025	<0.0047	0.0007	<0.001
MW-3	10-Oct-00	<0.0005	0.003	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.031	<0.0005	<0.01	<0.0005	<0.0005	0.02	0.0022	0.0018	<0.001
MW-3	24-Jan-01	<0.0005	0.0046	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.035	<0.0005	<0.01	<0.0005	<0.0005	0.021	0.0044	0.0007	<0.001
MW-3	09-Apr-01	<0.0005	0.0021	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.026	<0.0005	<0.01	<0.0005	<0.0005	0.015	0.0024	0.0009	<0.001
MW-3	05-Jul-01	<0.0005	0.0039	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.042	<0.0005	<0.01	<0.0005	<0.0005	0.026	0.0041	<0.0005	<0.001
MW-3	15-Oct-01	<0.0005	0.0025	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.028	<0.0005	<0.01	<0.0005	<0.0005	0.015	0.0025	0.0021	<0.001
MW-3	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	0.0009	<0.0005	<0.0005	<0.001
MW-3	03-Apr-02	na	na	na	na	na	<0.001	na	na	na	<0.001	na	na	<0.001	na	na	na	0.00119
MW-3	08-Apr-02	<0.0005	0.0019	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.041	<0.0005	<0.01	<0.0005	<0.0005	0.023	0.0017	<0.0005	<0.001
MW-3	08-Jul-02	<0.0005	0.0017	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.026	<0.0005	<0.01	<0.0005	<0.0005	0.014	0.0024	0.0013	<0.001
DUP	08-Jul-02	<0.0005	0.0018	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.024	<0.0005	<0.01	<0.0005	<0.0005	0.013	0.0025	0.0014	<0.001
MW-3	09-Oct-02	<0.0005	0.004	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.048	<0.0005	<0.01	<0.0005	<0.0005	0.023	0.0043	0.0007	<0.001
MW-3	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	<0.0005	<0.0005	0.0009	<0.0005	<0.0005	<0.001
MW-3	16-Apr-03	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.022	<0.0005	<0.01	<0.0005	<0.0005	0.011	<0.0005	0.0007	<0.001
MW-3	09-Jul-03	<0.0005	0.0014	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.035	<0.0005	<0.01	<0.0005	<0.0005	0.018	0.0013	0.0006	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
MW-2	29-Apr-10	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0018	<0.0005	<0.001	<0.001	<0.001	0.0017	0.0004 J
MW-3	16-Dec-94	na	na	na	na	0.018	na	na	na	<0.0014	na	0.0034	na	na	na	na	na
MW-3	29-Mar-95	<0	<0	na	<0	<0	na	na	na	<0.002	na	0.014	na	na	na	na	na
MW-3	08-Jun-95	<0	<0	na	<0	<0	na	na	na	<0	na	0.0016	na	na	na	na	na
MW-3	09-Jan-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
MW-3	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-3	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-3	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-3	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-3	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-3	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-3	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-3	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
MW-3	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MW-3	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MW-3	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MW-3	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MW-3	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MW-3	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	17-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	24-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	05-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-3	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	09-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
MW-2	29-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	0.0005 J	0.0058	<0.01	<0.0005	0.0027	<0.0005	<0.0005
MW-3	16-Dec-94	na	na	na	na	na	na	na	na	na	na	na
MW-3	29-Mar-95	na	na	na	na	na	na	na	na	na	na	na
MW-3	08-Jun-95	na	na	na	na	na	na	na	na	na	na	na
MW-3	09-Jan-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
MW-3	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na
MW-3	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na
MW-3	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na
MW-3	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na
MW-3	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na
MW-3	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na
MW-3	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na
MW-3	26-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
MW-3	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0036	<0.001	<0.001
MW-3	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0064	<0.001	<0.001
DUP	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0075	<0.001	<0.001
MW-3	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0059	<0.001	<0.001
MW-3	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0036	<0.001	<0.001
DUP	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0032	<0.001	<0.001
MW-3	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	0.0005 J11	na	<0.001	<0.002	<0.001	<0.001
MW-3	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.01	<0.0005	0.0021	<0.0005	<0.0005
MW-3	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0025	<0.0005	<0.0005
MW-3	17-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
MW-3	28-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
MW-3	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
MW-3	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0025	<0.0005	<0.0005
MW-3	24-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0015	<0.0005	<0.0005
MW-3	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
MW-3	05-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0018	<0.0005	<0.0005
MW-3	15-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
MW-3	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na
MW-3	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.003	<0.0005	<0.0005
MW-3	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
DUP	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
MW-3	09-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
MW-3	15-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	16-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0026	<0.0005	<0.0005
MW-3	09-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0017	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
MW-3	28-Oct-03	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.021	<0.0005	<0.01	<0.0005	<0.0005	0.01	0.001	0.0014	<0.001
MW-3	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	<0.0005	<0.0005	0.0076	<0.0005	0.0006	<0.001
DUP	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	<0.0005	<0.0005	0.0074	<0.0005	0.0006	<0.001
MW-3	04-May-04	<0.0005	0.0015	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.029	<0.0005	<0.01	<0.0005	<0.0005	0.016	0.0016	<0.0005	<0.001
MW-3	15-Jul-04	<0.0005	0.0014	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.03	<0.0005	<0.01	<0.0005	<0.0005	0.014	0.0015	0.0014	<0.001
MW-3	13-Oct-04	<0.0005	0.0011	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.021	<0.0005	<0.01	<0.0005	<0.0005	0.0091	0.0012	0.0016	<0.001
MW-3	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0022	<0.0005	<0.01	<0.0005	<0.0005	0.001	<0.0005	0.0003 J	<0.001
MW-3	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0055	<0.0005	<0.0005	<0.001
MW-3	19-Jul-05	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.006	0.0004 J	0.001	<0.001
DUP	19-Jul-05	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0057	0.0004 J	0.0009	<0.001
MW-3	27-Oct-05	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.023	<0.0005	<0.01	<0.0005	<0.0005	0.011	0.0012	0.0016	<0.001
MW-3	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.01	<0.0005	<0.01	<0.0005	<0.0005	0.0054	<0.0005	0.0004 J	<0.001
MW-3	17-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0044	<0.0005	<0.01	<0.0005	<0.0005	0.0021	<0.0005	<0.0005	<0.001
MW-3	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0031	<0.0005	<0.01	<0.0005	<0.0005	0.0018	<0.0005	<0.0005	<0.001
MW-3	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	<0.0005	<0.0005	0.0012	<0.0005	<0.0005	<0.001
MW-3	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.002	<0.0005	<0.01	<0.0005	<0.0005	0.0012	<0.0005	<0.0005	<0.001
MW-3	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
MW-3	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
MW-3	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
MW-3	12-Oct-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.001
MW-3	23-Feb-12	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0023	<0.0005	<0.01	<0.0005	<0.0005	0.0011	<0.0005	<0.0005	<0.001
DUP	23-Feb-12	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	<0.0005	<0.0005	0.0011	<0.0005	<0.0005	<0.001
MW-3	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
MW-3	22-Apr-13	<0.0005	0.0002 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.001
MW-3	29-Apr-14	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0049	<0.0005	<0.01	<0.0005	<0.0005	0.0023	0.0004 J	<0.0005	<0.001
MW-4	16-Dec-94	na	<0.0009	<0.0022	<0.0018	<0.0042	0.0014	na	<0.0008	na	0.0006	<0.0011	na	0.0021	<0.0011	0.013	<0.0014	0.0023
MW-4	29-Mar-95	<0	<0.0009	<0.003	<0.002	<0.005	0.0015	<0.0006	<0.0008	na	0.0007	<0.002	<0	0.001	<0.002	0.0069	<0.002	0.0037
MW-4	08-Jun-95	<0	<0	<0	<0	<0	0.0018	<0	<0	na	0.0011	<0	<0	0.0022	<0	0.0016	<0	0.0079
MW-4	10-Jan-96	<0	<0.005	<0.005	<0.05	<0.1	0.002	<0.005	<0.005	<0.005	0.002	<0.1	<0.005	0.027	<0.005	<0.005	<0.01	0.012
MW-4	19-Nov-96	na	na	na	na	na	0.0024	na	na	na	0.0017	na	na	0.0021	na	na	na	0.01
MW-4	18-Aug-97	na	na	na	na	na	0.0017	na	na	na	0.0017	na	na	0.0016	na	na	na	0.014
MW-4	19-Dec-97	na	na	na	na	na	0.0008	na	na	na	0.0011	na	na	0.001	na	na	na	0.006
MW-4	02-Mar-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	0.002
MW-4	10-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0033
MW-4	17-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0058
MW-4	23-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.005
MW-4	15-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	0.0014	<0.001	<0.001	0.0006 J11	0.0011	<0.005	<0.001	0.0018	<0.001	0.0017	<0.001	0.0054
MW-4	22-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.0058 U6	0.0012	<0.001	<0.001	<0.001	0.0012	<0.005	<0.001	0.0009 J11	<0.001	0.0016	<0.001	0.0059
MW-4	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0014	<0.0005	<0.0005	0.0008	0.0011	<0.01	<0.0005	0.0011	<0.0005	0.0027	<0.0005	0.0061

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
MW-3	28-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	04-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	27-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	17-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	12-Oct-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-3	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-4	16-Dec-94	na	na	na	na	<0.0008	na	na	na	<0.0014	na	<0.0012	na	na	na	na	na
MW-4	29-Mar-95	<0	<0	na	<0	<0	na	na	na	<0.002	na	<0.002	na	na	na	na	na
MW-4	08-Jun-95	<0	<0	na	<0	<0	na	na	na	<0	na	<0	na	na	na	na	na
MW-4	10-Jan-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
MW-4	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-4	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-4	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-4	02-Mar-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0037	0.0037	0.004	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
MW-4	10-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0024	0.0026	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MW-4	17-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0039	0.0045	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MW-4	23-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0029	0.0033	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MW-4	15-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0028	0.0032	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0007 J11	0.0008 J11
MW-4	22-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0038	0.0043	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0008 J11	0.0011
MW-4	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0038	0.0042	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	0.0009

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
MW-3	28-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
MW-3	20-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0023	<0.0005	<0.0005
DUP	20-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0022	<0.0005	<0.0005
MW-3	04-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
MW-3	15-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0017	<0.0005	<0.0005
MW-3	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
MW-3	18-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	0.0014	<0.0005	<0.0005
MW-3	19-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	0.001	<0.0005	<0.0005
DUP	19-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	0.001	<0.0005	<0.0005
MW-3	27-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	0.0013	<0.0005	<0.0005
MW-3	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	0.0011	<0.0005	<0.0005
MW-3	17-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0005 J	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
MW-3	18-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
MW-3	15-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0005 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	14-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0003 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	28-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	15-Apr-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	21-Jul-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	12-Oct-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	23-Feb-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0008	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	23-Feb-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0008	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0007	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	22-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	29-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0002 J	<0.01	<0.0005	0.0002 J	<0.0005	<0.0005
MW-4	16-Dec-94	na	na	na	na	na	na	na	na	na	na	na
MW-4	29-Mar-95	na	na	na	na	na	na	na	na	na	na	na
MW-4	08-Jun-95	na	na	na	na	na	na	na	na	na	na	na
MW-4	10-Jan-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
MW-4	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na
MW-4	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na
MW-4	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na
MW-4	02-Mar-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
MW-4	10-Apr-98	<0.001	<0.001	0.0047	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
MW-4	17-Jul-98	<0.001	<0.001	0.011	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
MW-4	23-Oct-98	0.001	<0.001	0.0082	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
MW-4	15-Jan-99	0.0006 J11	0.0007 J11	0.0064	<0.001	0.0005 J11	<0.001	na	<0.001	<0.002	<0.001	<0.001
MW-4	22-Apr-99	0.0008 J11	0.0007 J11	0.01	<0.001	0.0006 J11	<0.001	na	<0.001	<0.002	<0.001	<0.001
MW-4	16-Jul-99	0.0007	0.0006	0.0093	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
MW-4	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0016	<0.0005	<0.0005	0.0007	0.0012	<0.01	<0.0005	0.0013	<0.0005	0.0018	<0.0005	0.006
MW-4	25-Jan-00	<0.0005	0.0012	<0.0005	<0.01	<0.01	0.0012	<0.0005	<0.0005	0.0016	0.0009	<0.01	<0.0005	0.0006	<0.0005	0.0045	<0.0005	0.0041
MW-4	01-May-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0008	<0.0005	<0.0005	<0.0005	0.0007	<0.01	<0.0005	0.001	<0.0005	0.0015	<0.0005	0.0038
MW-4	25-Jul-00	<0.0005	0.0005	<0.0005	<0.01	<0.01	0.0014	<0.0005	<0.0005	0.0007	0.0008	<0.01	<0.0005	0.0008	<0.0005	<0.0019	<0.0005	0.0034
MW-4	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0013	<0.0005	<0.0005	0.0006	0.0009	<0.01	<0.0005	0.0006	<0.0005	0.0015	<0.0005	0.0042
MW-4	16-Jan-01	<0.0005	0.0018	<0.0005	<0.01	<0.01	0.0015	<0.0005	<0.0005	0.0016	0.0012	<0.01	<0.0005	0.0067	0.0005	0.0046	<0.0005	0.0058
MW-4	13-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0009	<0.0005	<0.0005	0.0006	0.0006	<0.01	<0.0005	0.0008	<0.0005	0.0014	<0.0005	0.0031
MW-4	02-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0028	0.0007	<0.0005	<0.001
MW-4	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0012	<0.0005	<0.0005	<0.0005	0.0008	<0.01	<0.0005	0.0006	<0.0005	0.001	<0.0005	0.0037
MW-4	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0015	<0.0005	<0.0005	0.0006	0.0021	<0.01	<0.0005	0.029	<0.0005	0.0014	<0.0005	0.0123
MW-4	09-Jan-02	<0.0005	0.0014	<0.0005	<0.01	<0.01	0.0014	<0.0005	<0.0005	0.001	0.001	<0.01	<0.0005	0.0011	<0.0005	0.0021	<0.0005	0.0046
MW-4	10-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0007	<0.0005	<0.0005	<0.0005	0.0008	<0.01	<0.0005	0.0013	<0.0005	0.0007	<0.0005	0.0053
DUP	10-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0009	<0.0005	<0.0005	<0.0005	0.0008	<0.01	<0.0005	0.0011	<0.0005	0.0007	<0.0005	0.0052
MW-4	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0005	<0.0005	<0.0005	<0.0005	<0.0006	<0.01	<0.0005	0.0006	<0.0005	0.0006	<0.0005	0.0021
MW-4	10-Oct-02	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	0.0013	<0.0005	<0.0005	0.0005 J	0.0008	<0.01	<0.0005	0.0013	<0.0005	0.0012	<0.0005	0.0033
MW-4	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	0.0028
MW-4	16-Apr-03	<0.0005	0.0014	<0.0005	<0.01	<0.01	0.0014	<0.0005	<0.0005	0.0012	0.0006	<0.01	<0.0005	<0.0005	<0.0005	0.0028	<0.0005	0.0024
MW-4	10-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	0.0024
MW-4	20-Jan-04	<0.0005	0.0018	<0.0005	<0.01	<0.01	0.0016	<0.0005	<0.0005	0.0014	0.0008	<0.01	<0.0005	<0.0005	<0.0005	0.003	<0.0005	0.0036
MW-4	06-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	0.0013
MW-4	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0019	<0.0005	<0.0005	0.0006	0.001	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	0.0039
MW-4	13-Oct-04	<0.0005	0.0008	<0.0005	<0.01	<0.01	0.0012	<0.0005	<0.0005	0.0007	0.0007	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	0.0033
MW-4	19-Jan-05	<0.0005	0.0021	<0.0005	<0.01	<0.01	0.0018	<0.0005	<0.0005	0.0016	0.0008	<0.01	<0.0005	0.0003 J	0.0004 J	0.0031	<0.0005	0.0032
MW-4	18-Apr-05	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	0.001	<0.0005	<0.0005	0.0003 J	0.0007	<0.01	<0.0005	0.0003 J	<0.0005	0.0008	<0.0005	0.0031
MW-4	19-Jul-05	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	0.0012	<0.0005	<0.0005	0.0003 J	0.0008	<0.01	<0.0005	0.0003 J	<0.0005	0.0009	<0.0005	0.0035
MW-4	27-Oct-05	<0.0005	0.0031	<0.0005	<0.01	<0.01	0.0012	<0.0005	<0.0005	0.0028	0.0007	<0.01	<0.0005	0.0004 J	0.0006	0.0056	<0.0005	0.0028
MW-4	26-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	0.0006	<0.0005	<0.0005	0.0003 J	0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	0.0026
MW-4	17-Apr-06	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	0.0007	<0.0005	<0.0005	0.0004 J	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	0.0015 J
MW-4	20-Apr-07	<0.0005	0.0009	<0.0005	<0.01	<0.01	0.0011	<0.0005	<0.0005	0.0008	0.0005 J	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	0.002
MW-4	18-Apr-08	<0.0005	0.0037	<0.0005	<0.01	<0.01	0.0006	<0.0005	<0.0005	0.0021	0.0004 J	<0.01	<0.0005	<0.0005	0.0007	0.0049	<0.0005	0.0015
MW-4	15-Apr-09	<0.0005	0.0006	<0.0005	<0.01	<0.01	0.0006	<0.0005	<0.0005	0.0004 J	0.0004 J	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	0.0019 J
MW-4	28-Apr-10	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	0.0004 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	0.001
MW-5	16-Dec-94	na	<0.018	<0.0022	<0.0018	1300	0.57	na	<0.0008	na	1.8	1700	na	73	<0.0011	<0.0008	<0.0014	7.8
MW-5	29-Mar-95	<0	<0.0009	<0.003	<0.002	290	0.47	<0.0006	<0.0008	na	1.3	42	<0	92	<0.002	<0.0008	<0.002	6.8
MW-5	08-Jun-95	0.0041	<0	<0	<0	82	0.4	<0	0.0009	na	1.9	95	0.0019	91	<0	0.011	<0	9.7
MW-5	10-Jan-96	<0	<5	<5	<50	130	0.95	<5	<5	<5	3	<100	<5	81	<5	<5	<10	15
MW-5	19-Nov-96	na	na	na	na	na	0.7	na	na	na	2.1	na	na	120	na	na	na	10
MW-5	18-Aug-97	na	na	na	na	na	0.4	na	na	na	1.6	na	na	84	na	na	na	8.1
MW-5	19-Dec-97	na	na	na	na	na	<0.5	na	na	na	2.5	na	na	120	na	na	na	11

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgLl)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
MW-4	25-Oct-99	<0.0005	0.0016	<0.0005	<0.0005	<0.0005	<0.0005	0.0035	0.0038	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.001	0.001
MW-4	25-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0024	0.0029	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	0.0008
MW-4	01-May-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0023	0.0027	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0006	0.0007
MW-4	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002	0.0023	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0006	<0.001
MW-4	09-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0022	0.0027	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	<0.0005
MW-4	16-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0023	0.0025	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	0.0008
MW-4	13-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0017	0.002	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	0.0006
MW-4	02-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-4	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002	0.0025	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0006	0.0008
MW-4	16-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0033	0.003	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	0.001
MW-4	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0016	0.0022	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0007	0.0006
MW-4	10-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0044	0.0055	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0005	0.0006
DUP	10-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0039	0.0048	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0006	0.0007
MW-4	09-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0024	<0.0027	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-4	10-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0014	0.0017	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0005	0.0008
MW-4	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002	0.0025	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-4	16-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001	0.0011	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0005	0.0006
MW-4	10-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0013	0.0016	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-4	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0014	0.0017	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	<0.0008
MW-4	06-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001	0.0015	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-4	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0016	0.0021	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0011	0.0011
MW-4	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001	0.001	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-4	19-Jan-05	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	0.001	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0006	<0.0005
MW-4	18-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0012	0.0014	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0006	0.0005 J
MW-4	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0013	0.0017	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0008	<0.0005
MW-4	27-Oct-05	<0.0005	0.0003 J	<0.0005	<0.0005	<0.0005	<0.0005	0.001	0.0012	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0007	0.0007
MW-4	26-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0011	0.0014	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0006	0.0005 J
MW-4	17-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	0.0006	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0004 J	0.0004 J
MW-4	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	0.0004 J	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0006	<0.0005
MW-4	18-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	0.0007	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0005 J	0.0012
MW-4	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	0.0007	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	0.0005 J	<0.0005
MW-4	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	0.0003 J
MW-5	16-Dec-94	na	na	na	na	<0.0008	na	na	na	0.13	na	<0.0012	na	na	na	na	na
MW-5	29-Mar-95	<0	<0	na	<0	<0	na	na	na	39	na	<0.002	na	na	na	na	na
MW-5	08-Jun-95	<0	0.0015	na	<0	<0	na	na	na	27	na	0.0023	na	na	na	na	na
MW-5	10-Jan-96	<5	<5	na	<5	<5	na	na	na	<50	na	<10	<10	<10	na	na	na
MW-5	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-5	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-5	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
MW-4	25-Oct-99	0.0007	0.0008	0.0091	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	25-Jan-00	0.0006	0.0006	0.0053	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	01-May-00	0.0006	0.0005	0.0041	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	25-Jul-00	0.0008	0.0006	<0.0038	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	09-Oct-00	0.0007	0.0007	0.0058	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	16-Jan-01	0.0006	0.0006	0.0055	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	13-Apr-01	<0.0005	<0.0005	0.0064	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	02-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
MW-4	06-Jul-01	<0.0005	0.0005	0.0047	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	16-Oct-01	0.0005	0.0006	0.0069	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	09-Jan-02	<0.0005	0.0005	0.004	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	10-Apr-02	0.0008	<0.0005	0.006	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	10-Apr-02	0.0007	0.0005	0.0064	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	09-Jul-02	0.0005	<0.0005	<0.0032	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	10-Oct-02	0.0005 J	0.0004 J	0.0044	<0.0005	0.0005 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	15-Jan-03	0.0005	<0.0005	<0.0029	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	16-Apr-03	<0.0005	<0.0005	<0.0032	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	10-Jul-03	<0.0005	<0.0005	0.0034	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	20-Jan-04	0.0006	0.0006	0.0046	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	06-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	14-Jul-04	0.0006	0.0007	0.0053	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	13-Oct-04	<0.0005	<0.0005	0.0036	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	19-Jan-05	0.0004 J	0.0005 J	0.0043	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
MW-4	18-Apr-05	0.0004 J	0.0005 J	0.0044	<0.0005	0.0005 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	19-Jul-05	0.0006	0.0006	0.0047	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	27-Oct-05	0.0005	0.0006	0.0042	<0.0005	0.0007	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
MW-4	26-Jan-06	0.0005 J	0.0005 J	0.0029	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	17-Apr-06	0.0003 J	0.0003 J	0.0021	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	20-Apr-07	0.0003 J	0.0004 J	0.0038	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	18-Apr-08	0.0003 J	0.0004 J	0.0034	<0.0005	0.0004 J	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
MW-4	15-Apr-09	0.0003 J	0.0004 J	0.0026	<0.0005	0.0003 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-4	28-Apr-10	<0.0005	<0.0005	0.0018 J	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
MW-5	16-Dec-94	na	na	na	na	na	na	na	na	na	na	na
MW-5	29-Mar-95	na	na	na	na	na	na	na	na	na	na	na
MW-5	08-Jun-95	na	na	na	na	na	na	na	na	na	na	na
MW-5	10-Jan-96	na	na	na	<5	na	na	<50	na	na	na	<5
MW-5	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na
MW-5	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na
MW-5	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
MW-5	02-Mar-98	<0	<5	<5	<100	374	<5	<5	<5	<5	<5	<100	<5	59.4	<5	<5	<10	<10
MW-5	10-Apr-98	<0	<10	<10	<50	260	<10	<10	<10	<10	<10	68	<10	94 J4	<10	<10	<10	<10
MW-5	17-Jul-98	<5	<5	<5	<25	94	<5	<5	<5	<5	<5	46	<5	96	<5	<5	<5	6.3
MW-5	19-Oct-98	<5 UJ2	<5 UJ2	<5 UJ2	<25 UJ2	99 J2	<5 UJ2	<5 UJ2	<5 UJ2	<5 UJ2	<5 UJ2	48 J2	<5 UJ2	67 J2	<5 UJ2	<5 UJ2	<5 UJ2	<5 UJ2
MW-5	15-Jan-99	<1	<1	<1	<5	130	<1	<1	<1	<1	1.6	52	<1	93	<1	<1	<1	7.1
MW-5	22-Apr-99	<1.3	<1.3	<1.3	<6.3	<230 U6	0.64 J11	<1.3	<1.3	<1.3	2.1	<65 U6	<1.3	93	<1.3	<1.3	<1.3	9.1
MW-5	19-Jul-99	<0.63	<0.63	<0.63	<13	130	<0.63	<0.63	<0.63	<0.63	1.4	65	<0.63	72	<0.63	<0.63	<0.63	6.6
DUP	19-Jul-99	<0.5	<0.5	<0.5	<10	130	<0.5	<0.5	<0.5	<0.5	1.4	65	<0.5	74	<0.5	<0.5	<0.5	6.7
MW-5	25-Oct-99	<0.5	<0.5	<0.5	<10	150	<0.5	<0.5	<0.5	<0.5	1.2	73	<0.5	65	<0.5	<0.5	<0.5	5.6
MW-5	25-Jan-00	<0.42	<0.42	<0.42	<8.3	130	<0.42	<0.42	<0.42	<0.42	1.5	64	<0.42	77	<0.42	<0.42	<0.42	7.2
MW-5	01-May-00	<0.25	<0.25	<0.25	<5	93	0.37	<0.25	<0.25	<0.25	1.6	47	<0.25	68	<0.25	<0.25	<0.25	7.2
MW-5	25-Jul-00	<0.17	<0.17	<0.17	<3.3	71	0.35	<0.17	<0.17	<0.17	1.4	46	<0.17	50	<0.17	<0.17	<0.17	6.4
MW-5	09-Oct-00	<0.36	<0.36	<0.36	<7.1	110	<0.36	<0.36	<0.36	<0.36	1.3	51	<0.36	44	<0.36	<0.36	<0.36	6.1
MW-5	16-Jan-01	<0.31	<0.31	<0.31	<6.3	90	0.42	<0.31	<0.31	<0.31	2	38	<0.31	36	<0.31	<0.31	<0.31	8.3
MW-5	13-Apr-01	<0.2	<0.2	<0.2	<4	58	0.34	<0.2	<0.2	<0.2	1.7	25	<0.2	21	<0.2	<0.2	<0.2	6.81
DUP	13-Apr-01	<0.2	<0.2	<0.2	<4	60	0.35	<0.2	<0.2	<0.2	1.7	26	<0.2	21	<0.2	<0.2	<0.2	6.68
MW-5	06-Jul-01	<0.2	<0.2	<0.2	<4	43	0.24	<0.2	<0.2	<0.2	1.2	16	<0.2	16	<0.2	<0.2	<0.2	4.79
MW-5	16-Oct-01	<0.13	<0.13	<0.13	<2.5	46	0.31	<0.13	<0.13	<0.13	1.5	23	<0.13	16	<0.13	<0.13	<0.13	5.49
DUP	16-Oct-01	<0.13	<0.13	<0.13	<2.5	45	0.29	<0.13	<0.13	<0.13	1.5	21	<0.13	17	<0.13	<0.13	<0.13	5.41
MW-5	09-Jan-02	<0.031	<0.031	<0.031	<0.63	10	0.15	<0.031	<0.031	<0.031	1.1	6.4	<0.031	9.1	<0.031	<0.031	<0.031	3.73
MW-5	10-Apr-02	<0.042	<0.042	<0.042	<0.83	31	0.31	<0.042	<0.042	<0.042	1.8	16	<0.042	16	<0.042	<0.042	<0.042	6.14
MW-5	09-Jul-02	<0.1	<0.1	<0.1	<2	<34	0.42	<0.1	<0.1	<0.1	<1.7	<12	<0.1	24	<0.1	<0.1	<0.1	0.86
MW-5	10-Oct-02	<0.063	<0.063	<0.063	<1.3	36	0.25	<0.063	<0.063	<0.063	1.2	17	<0.063	13	<0.063	<0.063	<0.063	4.48
MW-5	15-Jan-03	<0.042	<0.042	<0.042	<0.83	15	0.21	<0.042	<0.042	<0.042	1.7	6.2	<0.042	10	<0.042	<0.042	<0.042	5.01
MW-5	15-Apr-03	<0.031	<0.031	<0.031	<0.63	18	0.13	<0.031	<0.031	<0.031	0.73	12	<0.031	6.5	<0.031	<0.031	<0.031	1.62
MW-5	10-Jul-03	<0.05	<0.05	<0.05	<1	18	0.15	<0.05	<0.05	<0.05	0.76	6.9	<0.05	3.3	<0.05	<0.05	<0.05	1.883
MW-5	28-Oct-03	<0.063	<0.063	<0.063	<1.3	18	0.15	<0.063	<0.063	<0.063	0.88	9.6	<0.063	2.7	<0.063	<0.063	<0.063	1.791
MW-5	20-Jan-04	<0.031	<0.031	<0.031	<0.63	31	0.17	<0.031	<0.031	<0.031	0.99	11	<0.031	7.8	<0.031	<0.031	<0.031	2.09
MW-5	04-May-04	<0.042	<0.042	<0.042	<0.83	5.9	0.065	<0.042	<0.042	<0.042	0.42	1.6	<0.042	4.5	<0.042	<0.042	<0.042	1.18
MW-5	14-Jul-04	<0.036	<0.036	<0.036	<0.71	5.1	0.039	<0.036	<0.036	<0.036	0.23	3.5	<0.036	1.2	<0.036	<0.036	<0.036	0.37
MW-5	13-Oct-04	<0.071	<0.071	<0.071	<1.4	9.5	0.12	<0.071	<0.071	<0.071	0.92	4.1	<0.071	3.3	<0.071	<0.071	<0.071	2
MW-5	19-Jan-05	<0.02	<0.02	<0.02	<0.4	6.9	0.095	<0.02	<0.02	<0.02	0.8	2.3	<0.02	2.1	<0.02	<0.02	<0.02	1.43
MW-5	18-Apr-05	<0.0063	<0.0063	<0.0063	<0.13	3.2	0.049	<0.0063	<0.0063	<0.0063	0.22	1.2	<0.0063	0.96	<0.0063	<0.0063	<0.0063	0.295
MW-5	19-Jul-05	<0.005	<0.005	<0.005	<0.1	1.8	0.034	<0.005	<0.005	<0.005	0.26	0.58	<0.005	2.1	<0.005	<0.005	<0.005	0.82
MW-5	27-Oct-05	<0.013	<0.013	<0.013	<0.25	1.8	0.087	<0.013	<0.013	<0.013	0.59	<0.25	<0.013	1.4	<0.013	0.01 J	<0.013	0.87
MW-5	17-Apr-06	<0.036	<0.036	<0.036	<0.71	7.1	0.077	<0.036	<0.036	<0.036	0.73	1.4	<0.036	3.5	<0.036	<0.036	<0.036	2.11
MW-5	17-Apr-07	<0.0017	<0.0017	<0.0017	0.029 J	2.3	0.081	<0.0017	<0.0017	0.0013 J	0.99	0.77	0.0015 J	0.56	<0.0017	0.0039	<0.0017	1.029
MW-5	17-Apr-08	<0.0025	<0.0025	<0.0025	<0.05	1.1	0.035	<0.0025	<0.0025	<0.0025	0.22	0.34	<0.0025	0.3	<0.0025	0.0017 J	<0.0025	0.1277
MW-5	15-Apr-09	<0.0063	<0.0063	<0.0063	<0.13	0.99	0.063	<0.0063	<0.0063	<0.0063	0.73	0.67	<0.0063	0.33	<0.0063	0.0048 J	<0.0063	0.547

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
MW-5	02-Mar-98	<5	<5	<5	<5	<5	<5	<5	<5	36.1	<5	<5	<10	<10	<10	<5	<5
MW-5	10-Apr-98	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10
MW-5	17-Jul-98	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5
MW-5	19-Oct-98	<5 UJ2	<5 UJ2	<5 UJ2	<5 UJ2	<5 UJ2	140 J2	<5 UJ2	<5 UJ2	<25 UJ2	<5 UJ2	<5 UJ2	<5 UJ2	<5 UJ2	<5 UJ2	<5 UJ2	<5 UJ2
MW-5	15-Jan-99	<1	<1	<1	<1	<1	<1	<1	<1	21	<1	<1	<1	<1	<1	<1	<1
MW-5	22-Apr-99	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	32	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
MW-5	19-Jul-99	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	26	<0.63	<0.63	<1.3	<1.3	<1.3	<0.63	<0.63
DUP	19-Jul-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	27	<0.5	<0.5	<1	<1	<1	<0.5	<0.5
MW-5	25-Oct-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	29	<0.5	<0.5	<1	<1	<1	<0.5	<0.5
MW-5	25-Jan-00	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	27	<0.42	<0.42	<0.83	<0.83	<0.83	<0.42	<0.42
MW-5	01-May-00	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.35	<0.25	20	<0.25	<0.25	<0.5	<0.5	<0.5	<0.25	<0.25
MW-5	25-Jul-00	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	0.25	<0.17	20	<0.17	<0.17	<0.33	<0.33	<0.33	<0.17	<0.17
MW-5	09-Oct-00	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	21	<0.36	<0.36	<0.71	<0.71	<0.71	<0.36	<0.36
MW-5	16-Jan-01	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	0.53	<0.31	15	<0.31	<0.31	<0.63	<0.63	<0.63	<0.31	<0.31
MW-5	13-Apr-01	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.48	<0.2	9.4	<0.2	<0.2	<0.4	<0.4	<0.4	<0.2	<0.2
DUP	13-Apr-01	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.44	<0.2	9.1	<0.2	<0.2	<0.4	<0.4	<0.4	<0.2	<0.2
MW-5	06-Jul-01	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	4.5	<0.2	<0.2	<0.4	<0.4	<0.4	<0.2	<0.2
MW-5	16-Oct-01	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	0.32	<0.13	5.4	<0.13	<0.13	<0.25	<0.25	<0.25	<0.13	<0.13
DUP	16-Oct-01	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	0.31	<0.13	5.1	<0.13	<0.13	<0.25	<0.25	<0.25	<0.13	<0.13
MW-5	09-Jan-02	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	0.27	0.077	1.6	<0.031	<0.031	<0.063	<0.063	<0.063	<0.031	<0.031
MW-5	10-Apr-02	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	0.46	0.13	10	<0.042	<0.042	<0.083	<0.083	<0.083	<0.042	<0.042
MW-5	09-Jul-02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.63	<0.17	<8.2	<0.1	<0.21	<0.2	<0.2	<0.2	<0.1	<0.1
MW-5	10-Oct-02	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	0.34	0.1	8.1	<0.063	<0.063	<0.13	<0.13	<0.13	<0.063	<0.063
MW-5	15-Jan-03	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	0.63	0.18	2.8	<0.042	<0.042	<0.083	<0.083	<0.083	<0.042	<0.042
MW-5	15-Apr-03	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	0.1	0.032	3.6	<0.031	<0.031	<0.063	<0.063	<0.063	<0.031	<0.031
MW-5	10-Jul-03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	1.7	<0.05	<0.05	<0.1	<0.1	<0.1	<0.05	<0.05
MW-5	28-Oct-03	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	0.17	<0.063	2.8	<0.063	<0.063	<0.13	<0.13	<0.13	<0.063	<0.063
MW-5	20-Jan-04	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	0.21	0.057	5.7	<0.031	<0.031	<0.063	<0.063	<0.063	<0.031	<0.031
MW-5	04-May-04	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	0.15	0.046	<0.83	<0.042	<0.042	<0.083	<0.083	<0.083	<0.042	<0.042
MW-5	14-Jul-04	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	0.042	<0.036	0.87	<0.036	<0.036	<0.071	<0.071	<0.071	<0.036	<0.036
MW-5	13-Oct-04	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	0.2	<0.071	1.6	<0.071	<0.071	<0.14	<0.14	<0.14	<0.071	<0.071
MW-5	19-Jan-05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.24	0.071	1.1	<0.02	<0.02	<0.04	<0.04	<0.04	0.013 J	<0.02
MW-5	18-Apr-05	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	0.025	0.012	0.75	<0.0063	<0.0063	<0.013	<0.013	<0.013	<0.0063	<0.0063
MW-5	19-Jul-05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.12	0.047	0.39	<0.005	<0.005	<0.01	<0.01	<0.01	0.0064	<0.005
MW-5	27-Oct-05	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	0.14	0.051	0.5	<0.013	<0.013	<0.025	<0.025	<0.025	0.0088 J	<0.013
MW-5	17-Apr-06	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	0.44	0.13	1.8	<0.036	<0.036	<0.071	<0.071	<0.071	0.019 J	<0.063
MW-5	17-Apr-07	0.001 J	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	0.15	0.06	0.47	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	0.016	<0.0017
MW-5	17-Apr-08	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.011	0.0077	0.31	<0.0025	<0.0025	<0.005	<0.005	<0.005	0.0025	<0.0025
MW-5	15-Apr-09	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	0.15	0.05	0.32	<0.0063	<0.0063	<0.013	<0.013	<0.013	0.015	<0.0063

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
MW-5	02-Mar-98	<5	<5	<25	<5	<5	<5	<5	<5	<10	<5	<5
MW-5	10-Apr-98	<10	<10	<10	<10	<10	<10	na	<10	<20	<10	<10
MW-5	17-Jul-98	<5	<5	<5	<5	<5	<5	na	<5	<10	<5	<5
MW-5	19-Oct-98	<5 UJ2	<5 UJ2	<5 UJ2	<5 UJ2	<5 UJ2	<5 UJ2	na	<5 UJ2	<10 UJ2	<5 UJ2	<5 UJ2
MW-5	15-Jan-99	<1	<1	<1	<1	<1	<1	na	<1	<2	<1	<1
MW-5	22-Apr-99	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	na	<1.3	<2.5	<1.3	<1.3
MW-5	19-Jul-99	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<13	<0.63	<0.63	<0.63	<0.63
DUP	19-Jul-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5
MW-5	25-Oct-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5
MW-5	25-Jan-00	<0.42	<0.42	<0.83	<0.42	<0.42	<0.42	<8.3	<0.42	<0.42	<0.42	<0.42
MW-5	01-May-00	<0.25	<0.25	<0.5	<0.25	<0.25	<0.25	<5	<0.25	<0.25	<0.25	<0.25
MW-5	25-Jul-00	<0.17	<0.17	<0.33	<0.17	<0.17	<0.17	<3.3	<0.17	<0.17	<0.17	<0.17
MW-5	09-Oct-00	<0.36	<0.36	<0.71	<0.36	<0.36	<0.36	<7.1	<0.36	<0.36	<0.36	<0.36
MW-5	16-Jan-01	<0.31	<0.31	<0.63	<0.31	<0.31	<0.31	<6.3	<0.31	<0.31	<0.31	<0.31
MW-5	13-Apr-01	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<4	<0.2	<0.2	<0.2	<0.2
DUP	13-Apr-01	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<4	<0.2	<0.2	<0.2	<0.2
MW-5	06-Jul-01	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<4	<0.2	<0.2	<0.2	<0.2
MW-5	16-Oct-01	<0.13	<0.13	<0.25	<0.13	<0.13	<0.13	<2.5	<0.13	<0.13	<0.13	<0.13
DUP	16-Oct-01	<0.13	<0.13	<0.25	<0.13	<0.13	<0.13	<2.5	<0.13	<0.13	<0.13	<0.13
MW-5	09-Jan-02	<0.031	<0.031	<0.063	<0.031	<0.031	<0.031	<0.63	<0.031	<0.031	<0.031	<0.031
MW-5	10-Apr-02	<0.042	<0.042	<0.17	<0.042	<0.042	<0.042	<0.83	<0.042	<0.042	<0.042	<0.042
MW-5	09-Jul-02	<0.1	<0.1	<0.4	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.1	<0.1
MW-5	10-Oct-02	<0.063	<0.063	<0.25	<0.063	<0.063	<0.063	<1.3	<0.063	<0.063	<0.063	<0.063
MW-5	15-Jan-03	<0.042	0.054	<0.17	<0.042	<0.042	<0.042	<0.83	<0.042	<0.042	<0.042	<0.042
MW-5	15-Apr-03	<0.031	<0.031	<0.13	<0.031	<0.031	<0.031	<0.63	<0.031	<0.031	<0.031	<0.031
MW-5	10-Jul-03	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.05	<0.05
MW-5	28-Oct-03	<0.063	<0.063	<0.25	<0.063	<0.063	<0.063	<1.3	<0.063	<0.063	<0.063	<0.063
MW-5	20-Jan-04	<0.031	<0.031	<0.13	<0.031	<0.031	<0.031	<0.63	<0.031	<0.031	<0.031	<0.031
MW-5	04-May-04	<0.042	<0.042	<0.17	<0.042	<0.042	<0.042	<0.83	<0.042	<0.042	<0.042	<0.042
MW-5	14-Jul-04	<0.036	<0.036	<0.14	<0.036	<0.036	<0.036	<0.71	<0.036	<0.036	<0.036	<0.036
MW-5	13-Oct-04	<0.071	<0.071	<0.29	<0.071	<0.071	<0.071	<1.4	<0.071	<0.071	<0.071	<0.071
MW-5	19-Jan-05	<0.02	0.023	<0.08	<0.02	<0.02	<0.02	<0.4	<0.02	<0.02	<0.02	<0.02
MW-5	18-Apr-05	<0.0063	0.0048 J	<0.025	<0.0063	<0.0063	<0.0063	<0.13	<0.0063	<0.0063	<0.0063	<0.0063
MW-5	19-Jul-05	<0.005	0.012	<0.02	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005
MW-5	27-Oct-05	<0.013	0.014	0.028 J	<0.013	<0.013	<0.013	<0.25	<0.013	<0.013	<0.013	<0.013
MW-5	17-Apr-06	<0.063	0.04	<0.14	<0.036	<0.063	<0.036	<0.71	<0.036	<0.036	<0.036	<0.036
MW-5	17-Apr-07	<0.0017	0.021	0.011	<0.0017	0.0014 J	<0.0017	<0.033	<0.0017	<0.0017	<0.0017	<0.0017
MW-5	17-Apr-08	<0.0025	0.003	<0.01	<0.0025	<0.0025	<0.0025	<0.05	<0.0025	<0.0025	<0.0025	<0.0025
MW-5	15-Apr-09	<0.0063	0.024	<0.025	<0.0063	<0.0063	<0.0063	<0.13	<0.0063	<0.0063	<0.0063	<0.0063

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
DUP	15-Apr-09	<0.0063	<0.0063	<0.0063	<0.13	0.87	0.07	<0.0063	<0.0063	<0.0063	0.8	0.53	<0.0063	0.42	<0.0063	0.0042 J	<0.0063	0.673
MW-5	28-Apr-10	<0.0042	<0.0042	<0.0042	<0.083	0.48	0.052	<0.0042	<0.0042	<0.0042	0.56	0.27	<0.0042	0.29	<0.0042	0.0037 J	<0.0042	0.446
RP-1	08-Sep-94	<0	0.002	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	0.003	<0.005	<0.1	<0.005	<0.005	0.001	<0.005	<0.01	<0.01
RP-1	28-Feb-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-1	29-Mar-95	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
RP-1	10-May-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-1	09-Aug-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-1	17-Nov-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	0.0008	na	na	na	<0.002
RP-1	10-Jan-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	0.001	<0.005	<0.005	<0.01	<0.01
RP-1	17-Apr-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
DUP	17-Apr-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-1	31-Jul-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-1	19-Nov-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-1	25-Mar-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-1	10-Jun-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-1	18-Aug-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-1	19-Dec-97	na	na	na	na	na	<0.0005	na	na	na	0.0006	na	na	0.0006	na	na	na	0.002
DUP	19-Dec-97	na	na	na	na	na	<0.0005	na	na	na	0.0011	na	na	0.001	na	na	na	0.003
RP-1	26-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0013	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
DUP	26-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0013	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
RP-1	07-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0018	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-1	14-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.002	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-1	20-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0022	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-1	12-Jan-99	<0.001	0.0008 J11	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0022	<0.001	<0.005	<0.001	<0.001	0.0008 J11	<0.001	<0.001	<0.001
RP-1	19-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0009 J11	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-1	16-Jul-99	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.001
RP-1	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	27-Apr-00	<0.0005	0.0013	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	25-Jul-00	<0.0005	0.0015	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.001
RP-1	10-Oct-00	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	25-Jan-01	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	09-Apr-01	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	05-Jul-01	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	05-Jul-01	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	12-Oct-01	<0.0005	0.001	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.001
RP-1	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	03-Apr-02	na	na	na	na	na	<0.001	na	na	na	<0.001	na	na	<0.001	na	na	na	<0.001
RP-1	08-Apr-02	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
DUP	15-Apr-09	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	0.22	0.069	0.34	<0.0063	<0.0063	<0.013	<0.013	<0.013	0.024	<0.0063
MW-5	28-Apr-10	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	0.095	0.029	0.22	<0.0042	<0.0042	<0.0083	<0.0083	<0.0083	0.011	<0.0042
RP-1	08-Sep-94	<0.005	<0.005	<0.0005	<0.005	<0.005	na	na	na	<0.05	na	0.01	<0.01	<0.01	<0.0005	na	na
RP-1	28-Feb-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-1	29-Mar-95	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
RP-1	10-May-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-1	09-Aug-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-1	17-Nov-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-1	10-Jan-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
RP-1	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-1	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-1	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-1	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-1	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-1	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-1	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-1	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
DUP	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	0.0029	<0.002	<0.001	<0.001
RP-1	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-1	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-1	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-1	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-1	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-1	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	05-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	05-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-1	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
DUP	15-Apr-09	<0.0063	0.045	0.025	<0.0063	0.0035 J	<0.0063	<0.13	<0.0063	<0.0063	<0.0063	<0.0063
MW-5	28-Apr-10	<0.0042	0.017	0.0084 J	<0.0042	<0.0042	<0.0042	<0.083	<0.0042	<0.0042	<0.0042	<0.0042
RP-1	08-Sep-94	na	na	na	<0.005	na	na	<0.05	<0.0005	na	na	<0.005
RP-1	28-Feb-95	na	na	na	na	na	na	na	na	na	na	na
RP-1	29-Mar-95	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
RP-1	10-May-95	na	na	na	na	na	na	na	na	na	na	na
RP-1	09-Aug-95	na	na	na	na	na	na	na	na	na	na	na
RP-1	17-Nov-95	na	na	na	na	na	na	na	na	na	na	na
RP-1	10-Jan-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
RP-1	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na
DUP	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na
RP-1	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na
RP-1	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na
RP-1	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na
RP-1	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na
RP-1	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na
RP-1	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na
DUP	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na
RP-1	26-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
DUP	26-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
RP-1	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-1	14-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.002	<0.001	<0.001
RP-1	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-1	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0011 J11	<0.001	<0.001
RP-1	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-1	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
RP-1	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
RP-1	18-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	27-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-1	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-1	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	25-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	05-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	05-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	12-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-1	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na
RP-1	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
RP-1	08-Jul-02	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0017	<0.0005	<0.01	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.001
RP-1	09-Oct-02	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	15-Apr-03	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	09-Jul-03	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	28-Oct-03	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	03-May-04	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	15-Jul-04	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	19-Jan-05	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.001
RP-1	19-Apr-05	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.001
RP-1	19-Jul-05	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.001
RP-1	24-Oct-05	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0025	<0.0005	<0.01	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.001
RP-1	23-Jan-06	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	0.0005 J	<0.0005	<0.0005	<0.001
RP-1	17-Apr-06	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.001
RP-1	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0026	<0.0005	<0.01	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.001
RP-1	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.001
RP-1	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-1	23-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-2	08-Sep-94	<0	0.001	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	0.001	<0.005	<0.1	<0.005	0.0005	<0.005	0.0006	<0.01	<0.01
DUP	08-Sep-94	<0	0.001	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	0.001	<0.005	<0.1	<0.005	<0.005	<0.005	0.0005	<0.01	<0.01
RP-2	28-Feb-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-2	29-Mar-95	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
RP-2	10-May-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-2	09-Aug-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-2	17-Nov-95	na	na	na	na	na	0.002	na	na	na	0.0009	na	na	0.003	na	na	na	0.004
RP-2	10-Jan-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
RP-2	17-Apr-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-2	31-Jul-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-2	19-Nov-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-2	25-Mar-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-2	10-Jun-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
RP-1	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	09-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	28-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	03-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	17-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	15-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	22-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-1	23-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0002 J	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	08-Sep-94	<0.005	<0.005	<0.0005	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	<0.0005	na	na
DUP	08-Sep-94	<0.005	<0.005	<0.0005	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	<0.0005	na	na
RP-2	28-Feb-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-2	29-Mar-95	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	0.015	<0.01	<0.01	na	na	na
RP-2	10-May-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-2	09-Aug-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-2	17-Nov-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-2	10-Jan-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
RP-2	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-2	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-2	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-2	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-2	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
RP-1	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	09-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
RP-1	15-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	15-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	09-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	28-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	03-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	15-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
RP-1	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	19-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
RP-1	24-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
RP-1	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	17-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	18-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	15-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	14-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	28-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	15-Apr-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	21-Jul-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	23-Feb-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	22-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-1	23-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	08-Sep-94	na	na	na	<0.005	na	na	<0.05	<0.0005	na	na	<0.005
DUP	08-Sep-94	na	na	na	<0.005	na	na	<0.05	<0.0005	na	na	<0.005
RP-2	28-Feb-95	na	na	na	na	na	na	na	na	na	na	na
RP-2	29-Mar-95	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
RP-2	10-May-95	na	na	na	na	na	na	na	na	na	na	na
RP-2	09-Aug-95	na	na	na	na	na	na	na	na	na	na	na
RP-2	17-Nov-95	na	na	na	na	na	na	na	na	na	na	na
RP-2	10-Jan-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
RP-2	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na
RP-2	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na
RP-2	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na
RP-2	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na
RP-2	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
RP-2	18-Aug-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
DUP	18-Aug-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-2	19-Dec-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-2	26-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
RP-2	07-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0014	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-2	13-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0012	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-2	20-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-2	11-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0011	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-2	19-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0016	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	0.0006 J11	<0.001
RP-2	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-2	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0023	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	0.0012	<0.001
RP-2	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0026	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	0.0007	<0.001
DUP	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0028	<0.0005	<0.01	<0.0005	<0.0005	0.0007	<0.0005	0.0008	<0.001
RP-2	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0039	<0.0005	<0.01	<0.0005	<0.0005	0.0013	<0.0005	0.0015	<0.001
RP-2	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.007	<0.0005	<0.01	<0.0005	<0.0005	0.0024	<0.0005	0.0022	<0.001
RP-2	10-Oct-00	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0045	<0.0005	0.0029	<0.001
RP-2	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0044	<0.0005	0.0017	<0.001
RP-2	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0089	<0.0005	<0.01	<0.0005	<0.0005	0.0037	<0.0005	0.0023	<0.001
RP-2	05-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0058	<0.0005	0.0027	<0.001
RP-2	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	<0.0005	<0.0005	0.0054	<0.0005	0.0023	<0.001
RP-2	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.014	<0.0005	<0.01	<0.0005	<0.0005	0.0055	<0.0005	0.0023	<0.001
RP-2	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.01	<0.0005	<0.0005	0.0065	<0.0005	0.0018	<0.001
RP-2	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	<0.0005	<0.0005	0.0065	<0.0005	0.0019	<0.001
RP-2	09-Oct-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0049	<0.0005	0.0014	<0.001
DUP	09-Oct-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0049	<0.0005	0.0014	<0.001
RP-2	14-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.01	<0.0005	<0.01	<0.0005	<0.0005	0.0043	<0.0005	0.0013	<0.001
RP-2	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.01	<0.0005	<0.01	<0.0005	<0.0005	0.0038	<0.0005	0.0009	<0.001
RP-2	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0087	<0.0005	<0.01	<0.0005	<0.0005	0.0042	<0.0005	0.0015	<0.001
DUP	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0093	<0.0005	<0.01	<0.0005	<0.0005	0.0041	<0.0005	0.0015	<0.001
RP-2	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0099	<0.0005	<0.01	<0.0005	<0.0005	0.0043	<0.0005	0.0016	<0.001
RP-2	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.008 J	<0.0005	<0.01	<0.0005	<0.0005	0.0034 J	<0.0005	0.0012 J	<0.001
RP-2	03-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0069	<0.0005	<0.01	<0.0005	<0.0005	0.0028	<0.0005	<0.0005	<0.001
RP-2	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0065	<0.0005	<0.01	<0.0005	<0.0005	0.0024	<0.0005	0.0006	<0.001
RP-2	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0063	<0.0005	<0.01	<0.0005	<0.0005	0.0024	<0.0005	0.0007	<0.001
RP-2	17-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0053	<0.0005	<0.01	<0.0005	<0.0005	0.0022	<0.0005	0.0006	<0.001
RP-2	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0042	<0.0005	<0.01	<0.0005	<0.0005	0.0016	<0.0005	<0.0005	<0.001
RP-2	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0035	<0.0005	<0.01	<0.0005	<0.0005	0.0012	<0.0005	0.0004 J	<0.001
RP-2	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0037	<0.0005	<0.01	<0.0005	<0.0005	0.0014	<0.0005	0.0004 J	<0.001
RP-2	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0044	<0.0005	<0.01	<0.0005	<0.0005	0.0016	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
RP-2	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-2	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-2	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
RP-2	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-2	13-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-2	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-2	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-2	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-2	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	05-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	09-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	09-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	14-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	03-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	17-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	19-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
RP-2	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na
DUP	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na
RP-2	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na
RP-2	26-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
RP-2	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-2	13-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-2	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-2	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0015 J11	<0.001	<0.001
RP-2	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0015 J11	<0.001	<0.001
RP-2	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0016	<0.0005	<0.0005
RP-2	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0039	<0.0005	<0.0005
RP-2	18-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0022	<0.0005	<0.0005
DUP	18-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0023	<0.0005	<0.0005
RP-2	27-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0043	<0.0005	<0.0005
RP-2	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0039	<0.0005	<0.0005
RP-2	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0043	<0.0005	<0.0005
RP-2	17-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.003	<0.0005	<0.0005
RP-2	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0024	<0.0005	<0.0005
RP-2	05-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0019	<0.0005	<0.0005
RP-2	12-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0021	<0.0005	<0.0005
RP-2	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0017	<0.0005	<0.0005
RP-2	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0015	<0.0005	<0.0005
RP-2	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0011	<0.0005	<0.0005
RP-2	09-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
DUP	09-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.0005	<0.0005
RP-2	14-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
RP-2	15-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-2	09-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
DUP	09-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-2	27-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
RP-2	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006 J	<0.0005	<0.0005
RP-2	03-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	12-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	17-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
RP-2	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	19-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	24-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
RP-2	17-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0041	<0.0005	<0.01	<0.0005	<0.0005	0.0015	<0.0005	0.0003 J	<0.001
RP-2	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.001
DUP	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.001
RP-2	17-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.001
RP-2	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	0.0007	<0.001
RP-2	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	0.0003 J	<0.001
RP-2	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	0.0005 J	<0.0005	0.0004 J	<0.001
RP-2	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
RP-2	12-Oct-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.001
RP-2	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.001
RP-2	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.001
RP-2	19-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	0.0003 J	<0.001
RP-2	23-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	08-Sep-94	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
RP-3	28-Feb-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	0.0007	na	na	na	<0.002
RP-3	29-Mar-95	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
RP-3	10-May-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-3	09-Aug-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	0.0009	na	na	na	0.0094
RP-3	17-Nov-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	0.001	na	na	na	0.005
RP-3	10-Jan-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	0.0006	<0.005	<0.005	<0.01	0.003
RP-3	17-Apr-96	na	na	na	na	na	<0.0005	na	na	na	0.0006	na	na	<0.0005	na	na	na	0.008
RP-3	31-Jul-96	na	na	na	na	na	<0.0005	na	na	na	0.0005	na	na	0.0005	na	na	na	0.007
RP-3	19-Nov-96	na	na	na	na	na	<0.0005	na	na	na	0.0005	na	na	0.0005	na	na	na	0.003
RP-3	25-Mar-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	0.004
RP-3	10-Jun-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-3	18-Aug-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	0.0041
RP-3	19-Dec-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	0.0006	na	na	na	0.003
RP-3	25-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
RP-3	07-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-3	13-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-3	20-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	20-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-3	11-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-3	19-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-3	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	14-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
RP-2	17-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	17-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	12-Oct-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0001 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	19-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-2	23-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	08-Sep-94	<0.005	<0.005	<0.0005	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	<0.0005	na	na
RP-3	28-Feb-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-3	29-Mar-95	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
RP-3	10-May-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-3	09-Aug-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-3	17-Nov-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-3	10-Jan-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
RP-3	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-3	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-3	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-3	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-3	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-3	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-3	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-3	25-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
RP-3	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-3	13-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-3	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DUP	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-3	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-3	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	0.0007 J11	<0.001	<0.001	<0.001	<0.001	<0.001
RP-3	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	14-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
RP-2	17-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	20-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	20-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	17-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	14-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	28-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	15-Apr-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	21-Jul-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	21-Jul-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	12-Oct-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	23-Feb-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	19-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-2	23-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-3	08-Sep-94	na	na	na	<0.005	na	na	<0.05	<0.0005	na	na	<0.005
RP-3	28-Feb-95	na	na	na	na	na	na	na	na	na	na	na
RP-3	29-Mar-95	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
RP-3	10-May-95	na	na	na	na	na	na	na	na	na	na	na
RP-3	09-Aug-95	na	na	na	na	na	na	na	na	na	na	na
RP-3	17-Nov-95	na	na	na	na	na	na	na	na	na	na	na
RP-3	10-Jan-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
RP-3	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na
RP-3	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na
RP-3	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na
RP-3	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na
RP-3	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na
RP-3	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na
RP-3	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na
RP-3	25-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
RP-3	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-3	13-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-3	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
DUP	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-3	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-3	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-3	16-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-3	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-3	14-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
RP-3	27-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
RP-3	25-Jul-00	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	10-Oct-00	<0.0005	0.0015	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	17-Jan-01	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	10-Apr-01	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	03-Jul-01	<0.0005	0.0012	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	15-Oct-01	<0.0005	0.0012	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	08-Jan-02	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	08-Apr-02	<0.0005	0.0011	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	08-Jul-02	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	07-Oct-02	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	15-Apr-03	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.001
RP-3	27-Oct-03	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	19-Jan-04	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	19-Jan-04	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	03-May-04	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0017	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-3	17-Jan-05	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	0.0005 J	<0.001
RP-3	18-Apr-05	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0016	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0005 J	<0.001
RP-3	18-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0021	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
RP-3	24-Oct-05	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0028	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	0.0004 J	<0.001
RP-3	23-Jan-06	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0026	<0.0005	<0.01	<0.0005	<0.0005	0.0006	<0.0005	0.0007	<0.001
RP-3	17-Apr-06	<0.0005	0.0009	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	0.0003 J	0.0006	<0.001
RP-3	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0022	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	0.0004 J	<0.001
RP-3	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	0.0008	<0.001
DUP	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0017	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	0.0008	<0.001
RP-3	14-Apr-09	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	0.0003 J	<0.001
RP-3	28-Apr-10	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	<0.001
DUP	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	0.0003 J	<0.001
RP-3	17-Apr-12	<0.0005	0.008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.001
RP-3	19-Apr-13	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0002 J	<0.0005	<0.001
RP-3	28-Apr-14	<0.0005	0.0006	<0.0005	<0.01	<0.01 U5	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-4	08-Sep-94	<0	0.001	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	0.009	<0.005	<0.1	<0.005	<0.005	0.004	0.002	<0.01	<0.01
RP-4	28-Feb-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
DUP	28-Feb-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-4	29-Mar-95	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
RP-4	10-May-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
RP-3	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	03-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	07-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	09-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	03-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	14-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	17-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	18-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	18-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	17-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	18-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	19-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-3	28-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	08-Sep-94	<0.005	<0.005	<0.0005	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	<0.0005	na	na
RP-4	28-Feb-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	28-Feb-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-4	29-Mar-95	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
RP-4	10-May-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
RP-3	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-3	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
RP-3	17-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
RP-3	10-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-3	03-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
RP-3	15-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0013	<0.0005	<0.0005
RP-3	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
RP-3	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
RP-3	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0012	<0.0005	<0.0005
RP-3	07-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0008	<0.0005	<0.0005
RP-3	15-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
RP-3	15-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
RP-3	09-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-3	27-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
RP-3	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.0005	<0.0005
DUP	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0009	<0.0005	<0.0005
RP-3	03-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
RP-3	14-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
RP-3	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
RP-3	17-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
RP-3	18-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-3	18-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
RP-3	24-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-3	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005 J	<0.0005	<0.0005
RP-3	17-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-3	18-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
RP-3	16-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	16-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-3	14-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-3	28-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	28-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-3	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
RP-3	19-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
RP-3	28-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
RP-4	08-Sep-94	na	na	na	<0.005	na	na	<0.05	<0.0005	na	na	<0.005
RP-4	28-Feb-95	na	na	na	na	na	na	na	na	na	na	na
DUP	28-Feb-95	na	na	na	na	na	na	na	na	na	na	na
RP-4	29-Mar-95	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
RP-4	10-May-95	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
DUP	10-May-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-4	09-Aug-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
DUP	09-Aug-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-4	17-Nov-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
DUP	17-Nov-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-4	09-Jan-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	0.006	0.0005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
RP-4	17-Apr-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-4	31-Jul-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
DUP	31-Jul-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-4	19-Nov-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-4	25-Mar-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-4	10-Jun-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
DUP	10-Jun-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-4	18-Aug-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-4	19-Dec-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	0.0006	na	na	na	<0.002
RP-4	25-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0055	<0.001	<0.02	<0.001	<0.001	0.0016	0.0011	<0.002	<0.002
RP-4	07-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0061	<0.001	<0.005	<0.001	<0.001	0.0015	0.0013	<0.001	<0.001
RP-4	13-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0067	<0.001	<0.005	<0.001	<0.001	0.0019	0.0014	<0.001	<0.001
RP-4	20-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0076	<0.001	<0.005	<0.001	<0.001	0.0023	0.0011	<0.001	<0.001
RP-4	11-Jan-99	<0.001	0.0007 J11	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0098	<0.001	<0.005	<0.001	<0.001	0.0033	0.0015	0.0006 J11	<0.001
RP-4	19-Apr-99	<0.001	0.0008 J11	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.0094	<0.001	<0.005	<0.001	<0.001	0.003	0.0014	<0.001	<0.001
RP-4	13-Jul-99	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0095	<0.0005	<0.01	<0.0005	<0.0005	0.0032	0.0013	<0.0005	<0.001
DUP	13-Jul-99	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0095	<0.0005	<0.01	<0.0005	<0.0005	0.0032	0.0013	<0.0005	<0.001
RP-4	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0039	0.0011	<0.0005	<0.001
RP-4	18-Jan-00	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0045	0.001	0.0005	<0.001
RP-4	27-Apr-00	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0043	0.0012	<0.0005	<0.001
RP-4	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.01	<0.0005	<0.0005	0.0051	<0.001	0.0008	<0.001
RP-4	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	<0.0005	<0.0005	0.0043	0.0009	0.0006	<0.001
RP-4	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.01	<0.0005	<0.0005	0.0044	0.0008	0.0006	<0.001
RP-4	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	<0.0005	<0.0005	0.0039	0.0007	<0.0005	<0.001
RP-4	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.01	<0.0005	<0.0005	0.0037	0.0007	<0.0005	<0.001
RP-4	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0028	<0.0005	<0.0005	<0.001
RP-4	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0034	0.0007	<0.0005	<0.001
RP-4	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.016	<0.0005	<0.01	<0.0005	<0.0005	0.0046	0.0009	0.0006	<0.001
RP-4	07-Oct-02	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.003	0.0008	<0.0005	<0.001
RP-4	14-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0089	<0.0005	<0.01	<0.0005	<0.0005	0.0026	0.0006	0.0006	<0.001
RP-4	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0029	0.0007	<0.0005	<0.001
RP-4	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0093	<0.0005	<0.01	<0.0005	<0.0005	0.0026	0.0006	0.0005	<0.001
RP-4	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0029	0.0008	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgLl)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
DUP	10-May-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-4	09-Aug-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	09-Aug-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-4	17-Nov-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	17-Nov-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-4	09-Jan-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
RP-4	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-4	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-4	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-4	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-4	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-4	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-4	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-4	25-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
RP-4	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-4	13-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-4	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-4	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-4	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-4	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	25-Oct-99	<0.0005	0.0016	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	07-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	14-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
DUP	10-May-95	na	na	na	na	na	na	na	na	na	na	na
RP-4	09-Aug-95	na	na	na	na	na	na	na	na	na	na	na
DUP	09-Aug-95	na	na	na	na	na	na	na	na	na	na	na
RP-4	17-Nov-95	na	na	na	na	na	na	na	na	na	na	na
DUP	17-Nov-95	na	na	na	na	na	na	na	na	na	na	na
RP-4	09-Jan-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
RP-4	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na
RP-4	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na
DUP	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na
RP-4	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na
RP-4	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na
RP-4	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na
DUP	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na
RP-4	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na
RP-4	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na
RP-4	25-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0027	<0.001	<0.001
RP-4	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0025	<0.001	<0.001
RP-4	13-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-4	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0047	<0.001	<0.001
RP-4	11-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0034	<0.001	<0.001
RP-4	19-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	0.0025	<0.001	<0.001
RP-4	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.003	<0.0005	<0.0005
DUP	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.003	<0.0005	<0.0005
RP-4	25-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0025	<0.0005	<0.0005
RP-4	18-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0021	<0.0005	<0.0005
RP-4	27-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0015	<0.0005	<0.0005
RP-4	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
RP-4	17-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
RP-4	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	12-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-4	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-4	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	07-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	14-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	15-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
RP-4	08-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	27-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
RP-4	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0082	<0.0005	<0.01	<0.0005	<0.0005	0.0022	0.0006	<0.0005	<0.001
RP-4	03-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0079	<0.0005	<0.01	<0.0005	<0.0005	0.002	0.0007	<0.0005	<0.001
RP-4	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0095	<0.0005	<0.01	<0.0005	<0.0005	0.0026	0.0009	<0.0005	<0.001
RP-4	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.008	<0.0005	<0.01	<0.0005	<0.0005	0.0019	0.0007	<0.0005	<0.001
RP-4	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0079	<0.0005	<0.01	<0.0005	<0.0005	0.0021	0.0006	<0.0005	<0.001
RP-4	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0073	<0.0005	<0.01	<0.0005	<0.0005	0.0019	0.0006	<0.0005	<0.001
RP-4	18-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0062	<0.0005	<0.01	<0.0005	<0.0005	0.0019	0.0005 J	<0.0005	<0.001
RP-4	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0091	<0.0005	<0.01	<0.0005	<0.0005	0.0027	0.0006	0.0003 J	<0.001
DUP	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0089	<0.0005	<0.01	<0.0005	<0.0005	0.0024	0.0007	0.0003 J	<0.001
RP-4	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0079	<0.0005	<0.01	<0.0005	<0.0005	0.0023	0.0007	<0.0005	<0.001
RP-4	18-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.006	<0.0005	<0.01	<0.0005	<0.0005	0.0019	0.0005	<0.0005	<0.001
DUP	18-Apr-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0061	<0.0005	<0.01	<0.0005	<0.0005	0.0018	0.0005	<0.0005	<0.001
RP-4	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.002	<0.0005	<0.01	<0.0005	<0.0005	0.0007	0.0004 J	<0.0005	<0.001
RP-4	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	0.0006	0.0005 J	<0.0005	<0.001
RP-4	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	0.0003 J	<0.0005	<0.001
DUP	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	0.0004 J	<0.0005	<0.001
RP-4	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005 J	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.001
RP-4	15-Apr-11	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	0.0003 J	<0.0005	<0.001
DUP	15-Apr-11	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	0.0003 J	<0.0005	<0.001
RP-4	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0003 J	<0.0005	<0.001
RP-4	12-Oct-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	0.0002 J	<0.0005	<0.001
RP-4	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
RP-4	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
RP-4	19-Apr-13	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0005 J	<0.0005	<0.01	<0.0005	<0.0005	0.0001 J	0.0002 J	<0.0005	<0.001
RP-4	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	0.0002 J	0.0001 J	<0.0005	<0.001
DUP	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0002 J	<0.0005	<0.001
RP-5	08-Sep-94	<0	0.0008	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	0.0005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
RP-5	28-Feb-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	0.0009	na	na	na	<0.002
RP-5	29-Mar-95	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
RP-5	10-May-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-5	09-Aug-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-5	17-Nov-95	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-5	09-Jan-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
DUP	09-Jan-96	<0	<0.005	<0.005	<0.05	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
RP-5	17-Apr-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-5	31-Jul-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-5	19-Nov-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
DUP	19-Nov-96	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-5	25-Mar-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
RP-4	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	03-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	18-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	18-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	18-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	12-Oct-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0001 J	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	19-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-4	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	08-Sep-94	<0.005	<0.005	<0.0005	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	<0.0005	na	na
RP-5	28-Feb-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-5	29-Mar-95	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
RP-5	10-May-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-5	09-Aug-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-5	17-Nov-95	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-5	09-Jan-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
DUP	09-Jan-96	<0.005	<0.005	na	<0.005	<0.005	na	na	na	<0.05	na	<0.01	<0.01	<0.01	na	na	na
RP-5	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-5	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-5	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DUP	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-5	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
RP-4	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	03-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	12-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
RP-4	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
RP-4	18-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	24-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
DUP	24-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
RP-4	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
RP-4	18-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	18-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	16-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	14-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	14-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	28-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	15-Apr-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	15-Apr-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	21-Jul-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	12-Oct-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	23-Feb-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	19-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-4	29-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	29-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	08-Sep-94	na	na	na	<0.005	na	na	<0.05	<0.0005	na	na	<0.005
RP-5	28-Feb-95	na	na	na	na	na	na	na	na	na	na	na
RP-5	29-Mar-95	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
RP-5	10-May-95	na	na	na	na	na	na	na	na	na	na	na
RP-5	09-Aug-95	na	na	na	na	na	na	na	na	na	na	na
RP-5	17-Nov-95	na	na	na	na	na	na	na	na	na	na	na
RP-5	09-Jan-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
DUP	09-Jan-96	na	na	na	<0.005	na	na	<0.05	na	na	na	<0.005
RP-5	17-Apr-96	na	na	na	na	na	na	na	na	na	na	na
RP-5	31-Jul-96	na	na	na	na	na	na	na	na	na	na	na
RP-5	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na
DUP	19-Nov-96	na	na	na	na	na	na	na	na	na	na	na
RP-5	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
DUP	25-Mar-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-5	10-Jun-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	<0.0005	na	na	na	<0.002
RP-5	18-Aug-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	0.0006	na	na	na	<0.002
RP-5	19-Dec-97	na	na	na	na	na	<0.0005	na	na	na	<0.0005	na	na	0.0025	na	na	na	<0.002
RP-5	26-Feb-98	<0	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
RP-5	07-Apr-98	<0	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-5	13-Jul-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-5	20-Oct-98	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-5	12-Jan-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0007 J11	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-5	20-Apr-99	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.0007 J11	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-5	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0009	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-5	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0009	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-5	18-Jan-00	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	0.001	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-5	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-5	25-Jul-00	<0.0005	0.0013	<0.0005	<0.01	<0.01	<0.0005	0.0011	<0.0005	0.0041	<0.0005	<0.01	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.001
RP-5	10-Oct-00	<0.0005	0.0012	<0.0005	<0.01	<0.01	<0.0005	0.0014	<0.0005	0.006	<0.0005	<0.01	<0.0005	<0.0005	0.0012	<0.0005	<0.0005	<0.001
RP-5	17-Jan-01	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	0.001	<0.0005	0.0084	<0.0005	<0.01	<0.0005	<0.0005	0.0018	<0.0005	<0.0005	<0.001
RP-5	09-Apr-01	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	0.0096	<0.0005	<0.01	<0.0005	<0.0005	0.0021	<0.0005	<0.0005	<0.001
RP-5	02-Jul-01	<0.0005	0.0008	<0.0005	<0.01	<0.01	<0.0005	0.001	<0.0005	0.01	<0.0005	<0.01	<0.0005	<0.0005	0.0024	0.0005	<0.0005	<0.001
RP-5	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0009	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0026	<0.0005	<0.0005	<0.001
DUP	12-Oct-01	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	0.001	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0027	0.0006	<0.0005	<0.001
RP-5	09-Jan-02	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	0.01	<0.0005	<0.01	<0.0005	<0.0005	0.0028	0.0005	<0.0005	<0.001
DUP	09-Jan-02	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	0.01	<0.0005	<0.01	<0.0005	<0.0005	0.0026	0.0005	0.0005	<0.001
RP-5	08-Apr-02	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	0.0009	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0033	0.0007	<0.0005	<0.001
RP-5	08-Jul-02	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0032	0.0007	<0.0005	<0.001
RP-5	07-Oct-02	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0008	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0026	0.0006	0.0003 J	<0.001
RP-5	14-Jan-03	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0029	0.0007	<0.0005	<0.001
RP-5	15-Apr-03	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0031	0.0008	<0.0005	<0.001
RP-5	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.003	0.0006	<0.0005	<0.001
RP-5	27-Oct-03	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0007	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0029	0.0007	<0.0005	<0.001
RP-5	19-Jan-04	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0028	0.0006	<0.0005	<0.001
RP-5	03-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0097	<0.0005	<0.01	<0.0005	<0.0005	0.0027	0.0007	<0.0005	<0.001
RP-5	12-Jul-04	<0.0005	0.0007	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0027	0.0008	<0.0005	<0.001
RP-5	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	0.009	<0.0005	<0.01	<0.0005	<0.0005	0.0024	<0.0005	<0.0005	<0.001
DUP	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0082	<0.0005	<0.01	<0.0005	<0.0005	0.0021	<0.0005	<0.0005	<0.001
RP-5	19-Jan-05	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	<0.0005	0.0005 J	<0.0005	0.008	<0.0005	<0.01	<0.0005	<0.0005	0.002	0.0004 J	<0.0005	<0.001
RP-5	19-Apr-05	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	0.0005 J	<0.0005	0.0071	<0.0005	<0.01	<0.0005	<0.0005	0.0019	0.0004 J	<0.0005	<0.001
RP-5	18-Jul-05	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	0.0005	<0.0005	0.0078	<0.0005	<0.01	<0.0005	<0.0005	0.0022	0.0006	<0.0005	<0.001
RP-5	24-Oct-05	<0.0005	0.0005 J	<0.0005	<0.01	<0.01	<0.0005	0.0006	<0.0005	0.0085	<0.0005	<0.01	<0.0005	<0.0005	0.0021	0.0006	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgLl)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
DUP	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-5	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-5	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-5	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RP-5	26-Feb-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
RP-5	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-5	13-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-5	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-5	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-5	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RP-5	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	18-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	17-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	02-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	12-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	08-Apr-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	08-Jul-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	07-Oct-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	14-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	15-Apr-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	08-Jul-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0014	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	27-Oct-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	19-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	03-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	12-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	13-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	19-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	18-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	24-Oct-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
DUP	25-Mar-97	na	na	na	na	na	na	na	na	na	na	na
RP-5	10-Jun-97	na	na	na	na	na	na	na	na	na	na	na
RP-5	18-Aug-97	na	na	na	na	na	na	na	na	na	na	na
RP-5	19-Dec-97	na	na	na	na	na	na	na	na	na	na	na
RP-5	26-Feb-98	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
RP-5	07-Apr-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-5	13-Jul-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-5	20-Oct-98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-5	12-Jan-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-5	20-Apr-99	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	na	<0.001	<0.002	<0.001	<0.001
RP-5	13-Jul-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	18-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	27-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
RP-5	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.001	<0.0005	<0.0005
RP-5	17-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
RP-5	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
RP-5	02-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0007	<0.0005	<0.0005
RP-5	12-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
DUP	12-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-5	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
DUP	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	08-Apr-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0006	<0.0005	<0.0005
RP-5	08-Jul-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	07-Oct-02	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	14-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	15-Apr-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.0005	<0.0005
RP-5	08-Jul-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	27-Oct-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	19-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	03-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	12-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	13-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	19-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0004 J	<0.0005	<0.0005
RP-5	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	18-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
RP-5	24-Oct-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
RP-5	23-Jan-06	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	0.0005 J	<0.0005	0.0071	<0.0005	<0.01	<0.0005	<0.0005	0.0018	0.0004 J	<0.0005	<0.001
RP-5	18-Apr-06	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	0.0004 J	<0.0005	0.0066	<0.0005	<0.01	<0.0005	<0.0005	0.0017	0.0005	<0.0005	<0.001
RP-5	20-Apr-07	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	0.0004 J	<0.0005	0.0044	<0.0005	<0.01	<0.0005	<0.0005	0.0014	0.0006	<0.0005	<0.001
RP-5	16-Apr-08	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	0.0035	<0.0005	<0.01	<0.0005	<0.0005	0.001	0.0003 J	<0.0005	<0.001
RP-5	14-Apr-09	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	0.0024	<0.0005	<0.01	<0.0005	<0.0005	0.0008	0.0004 J	<0.0005	<0.001
RP-5	28-Apr-10	<0.0005	0.0004 J	<0.0005	<0.01	<0.01	<0.0005	0.0003 J	<0.0005	0.0015	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.001
RP-5	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
RP-5	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-5	12-Oct-11	<0.0005	0.0001 J	<0.0005	<0.01	<0.01	<0.0005	0.0002 J	<0.0005	0.002	<0.0005	<0.01	<0.0005	<0.0005	0.0002 J	<0.0005	<0.0005	<0.001
RP-5	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	0.0003 J	<0.0005	<0.001
RP-5	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	<0.0005	<0.0005	<0.001
RP-5	19-Apr-13	<0.0005	0.0002 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.01	<0.0005	<0.0005	0.0003 J	0.0002 J	<0.0005	<0.001
RP-5	29-Apr-14	<0.0005	0.0002 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	0.0001 J	0.0002 J	0.0003 J	<0.0005	0.0001 J
RP-BW-02	11-Oct-99	<0.0005	0.16	<0.0005	<0.01	0.052	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-BW-02	20-Jan-00	<0.0005	0.15	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-BW-02	28-Apr-00	<0.0005	0.16	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-BW-02	25-Jul-00	<0.0005	0.17	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-BW-02	10-Oct-00	<0.0005	0.18	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0012	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-BW-02	18-Jan-01	<0.0007	0.17	<0.0007	<0.014	<0.014	<0.0007	<0.0007	<0.0007	0.0011	<0.0007	<0.014	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0014
DUP	18-Jan-01	<0.0007	0.18	<0.0007	<0.014	<0.014	<0.0007	<0.0007	<0.0007	0.0012	<0.0007	<0.014	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0014
RP-BW-02	10-Jan-02	<0.0005	0.15	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	10-Jan-02	<0.0005	0.14	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
RP-BW-02	15-Jan-03	<0.0005	0.16	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.001
RP-BW-02	20-Jan-04	<0.0005	0.15	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0035	<0.0005	<0.01	<0.0005	<0.0005	0.0006	0.0008	<0.0005	<0.001
RP-BW-02	15-Jul-04	<0.0005	0.16	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0044	<0.0005	<0.01	<0.0005	<0.0005	0.0006	0.0008	<0.0005	<0.001
RP-BW-02	19-Jan-05	<0.001	0.15	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0047	<0.001	<0.02	<0.001	<0.001	0.0009 J	0.0008 J	<0.001	<0.002
RP-BW-02	25-Jan-06	<0.001	0.15	<0.001	<0.02	<0.02	<0.001	<0.001	<0.001	0.0056	<0.001	<0.02	<0.001	<0.001	0.0009 J	0.001 J	<0.001	<0.002
RP-BW-02	17-Apr-07	<0.0005	0.096	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0078	<0.0005	<0.01	<0.0005	<0.0005	0.0014	0.0015	<0.0005	<0.001
RP-BW-02	17-Apr-08	<0.0007	0.1	<0.0007	<0.014	<0.014	<0.0007	<0.0007	<0.0007	0.0091	<0.0007	<0.014	<0.0007	<0.0007	0.0015	0.0026	<0.0007	<0.0014
RP-BW-02	15-Apr-09	<0.0005	0.079	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0021	0.0018	<0.0005	<0.001
RP-BW-02	30-Apr-10	<0.0005	0.061	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0018	0.0016	<0.0005	<0.001
SA-AW-01	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	13-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-pentanone	Bromobenzene	Carbon Disulfide	Chloroethane	Chloromethane	Dichlorodifluoromethane	Isopropylbenzene	n-Butylbenzene
RP-5	23-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	18-Apr-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	28-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	15-Apr-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	21-Jul-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	12-Oct-11	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	23-Feb-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	17-Apr-12	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	19-Apr-13	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-5	29-Apr-14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0001 J	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-BW-02	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0046	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-BW-02	20-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-BW-02	28-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-BW-02	25-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0008	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-BW-02	10-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-BW-02	18-Jan-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.014	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0007	<0.0007
DUP	18-Jan-01	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.014	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0007	<0.0007
RP-BW-02	10-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	10-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-BW-02	15-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-BW-02	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-BW-02	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-BW-02	19-Jan-05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
RP-BW-02	25-Jan-06	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
RP-BW-02	17-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-BW-02	17-Apr-08	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.014	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0007	<0.0007
RP-BW-02	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
RP-BW-02	30-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	13-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
RP-5	23-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
RP-5	18-Apr-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	20-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	16-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	14-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	28-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	15-Apr-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	21-Jul-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	12-Oct-11	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	23-Feb-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	17-Apr-12	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	19-Apr-13	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-5	29-Apr-14	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
RP-BW-02	11-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0098	<0.0005	<0.0005
RP-BW-02	20-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0097	<0.0005	<0.0005
RP-BW-02	28-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0089	<0.0005	<0.0005
RP-BW-02	25-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0087	<0.0005	<0.0005
RP-BW-02	10-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0093	<0.0005	<0.0005
RP-BW-02	18-Jan-01	<0.0007	<0.0007	<0.0014	<0.0007	<0.0007	<0.0007	<0.014	<0.0007	0.0072	<0.0007	<0.0007
DUP	18-Jan-01	<0.0007	<0.0007	<0.0014	<0.0007	<0.0007	<0.0007	<0.014	<0.0007	0.007	<0.0007	<0.0007
RP-BW-02	10-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0074	<0.0005	<0.0005
DUP	10-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0081	<0.0005	<0.0005
RP-BW-02	15-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0076	<0.0005	<0.0005
RP-BW-02	20-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0061	<0.0005	<0.0005
RP-BW-02	15-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0066	<0.0005	<0.0005
RP-BW-02	19-Jan-05	<0.001	<0.001	<0.004	<0.001	<0.001	<0.001	<0.02	<0.001	0.006	<0.001	<0.001
RP-BW-02	25-Jan-06	<0.001	<0.001	<0.004	<0.001	<0.001	<0.001	<0.02	<0.001	0.0048	<0.001	<0.001
RP-BW-02	17-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0039	<0.0005	<0.0005
RP-BW-02	17-Apr-08	<0.0007	<0.0007	<0.0029	<0.0007	<0.0007	<0.0007	<0.014	<0.0007	0.0033	<0.0007	<0.0007
RP-BW-02	15-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0038	<0.0005	<0.0005
RP-BW-02	30-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0026	<0.0005	<0.0005
SA-AW-01	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	13-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	27-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	24-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	25-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	17-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
SA-AW-01	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-01	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-02	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-02	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-02	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-02	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-02	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-02	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-02	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-02	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-02	25-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-03	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-03	19-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-03	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-03	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-03	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-03	18-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-03	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-03	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0011	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-03	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-03	21-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-03	25-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-04	14-Oct-99	0.001	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0008	<0.0005	<0.0005	0.0007	<0.0005	<0.001
SA-AW-04	19-Jan-00	0.0011	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0009	<0.0005	<0.0005	0.0008	<0.0005	<0.001
DUP	19-Jan-00	0.0012	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.001	<0.0005	<0.0005	0.0008	<0.0005	<0.001
SA-AW-04	27-Apr-00	0.0007	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	0.0006	<0.0005	<0.001
DUP	27-Apr-00	0.0007	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0007	<0.0005	<0.0005	0.0006	<0.0005	<0.001
SA-AW-04	24-Jul-00	0.001	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0008	<0.0005	<0.0005	0.0006	<0.0005	<0.001
DUP	24-Jul-00	0.0007	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-04	11-Oct-00	0.0007	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-04	25-Jan-01	0.0008	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-04	09-Jan-02	0.0011	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.001	<0.0005	<0.0005	0.0007	<0.0005	<0.001
SA-AW-04	17-Jan-03	0.0006	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.002	<0.0005	<0.0005	0.0006	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
SA-AW-01	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-01	27-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-02	25-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-02	10-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-02	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-02	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-02	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-02	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-02	22-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-02	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-02	25-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-03	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-03	19-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-03	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-03	24-Jul-00	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-03	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-03	18-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-03	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-03	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-03	21-Jan-04	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-03	21-Jan-05	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-03	25-Jan-06	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-04	14-Oct-99	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-04	19-Jan-00	0.0011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	19-Jan-00	0.0012	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-04	27-Apr-00	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	27-Apr-00	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-04	24-Jul-00	0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	24-Jul-00	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-04	11-Oct-00	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-04	25-Jan-01	0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-04	09-Jan-02	0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-04	17-Jan-03	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
SA-AW-01	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	20-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	24-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	16-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	0.0013	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	16-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	15-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-01	27-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-02	25-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-02	10-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-02	06-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-02	15-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-02	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-02	17-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-02	22-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-02	20-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-02	25-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-03	12-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-03	19-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-03	27-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-03	24-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-03	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-03	18-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-03	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-03	17-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-03	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-03	21-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-03	25-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-04	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-04	19-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	19-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-04	27-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	27-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-04	24-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	24-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-04	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-04	25-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-04	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-04	17-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
SA-AW-04	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-AW-04	18-Jan-05	0.001	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.01	0.0037	<0.0005	<0.0005	0.0017	<0.0005	<0.001
DUP	18-Jan-05	0.0003 J	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0009	<0.0005	<0.0005	0.0005 J	<0.0005	<0.001
SA-AW-04	25-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0007	<0.0005	<0.0005	0.0004 J	<0.0005	<0.001
SA-AW-04	20-Apr-07	0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0004 J	<0.0005	<0.0005	<0.01	0.0035	<0.0005	<0.0005	0.0013	<0.0005	<0.001
SA-AW-05	14-Oct-99	0.0024	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.004	<0.0005	<0.0005	0.0024	<0.0005	<0.001
DUP	14-Oct-99	0.0023	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0039	<0.0005	<0.0005	0.0025	<0.0005	<0.001
SA-AW-05	19-Jan-00	0.0025	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0013	<0.0005	<0.0005	<0.01	0.0034	<0.0005	<0.0005	0.0021	<0.0005	<0.001
SA-AW-05	27-Apr-00	0.0027	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0012	<0.0005	<0.0005	<0.01	0.0039	<0.0005	<0.0005	0.0021	<0.0005	<0.001
SA-AW-05	24-Jul-00	0.0029	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0043	<0.0005	<0.0005	<0.01	0.0037	<0.0005	<0.0005	0.0019	<0.0005	<0.001
SA-AW-05	11-Oct-00	0.0025	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0045	<0.0005	<0.0005	0.0022	<0.0005	<0.001
DUP	11-Oct-00	0.0025	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0043	<0.0005	<0.0005	0.0023	<0.0005	<0.001
SA-AW-05	18-Jan-01	0.0025	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.01	0.0042	<0.0005	<0.0005	0.0023	<0.0005	<0.001
SA-AW-05	09-Jan-02	0.0023	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.01	0.004	<0.0005	<0.0005	0.0016	<0.0005	<0.001
SA-AW-05	17-Jan-03	0.0015	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0013	<0.0005	<0.0005	<0.01	0.005	<0.0005	<0.0005	0.0021	<0.0005	<0.001
DUP	17-Jan-03	0.0016	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0011	<0.0005	<0.0005	<0.01	0.0051	<0.0005	<0.0005	0.0022	<0.0005	<0.001
SA-AW-05	21-Jan-04	0.0012	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.01	0.0039	<0.0005	<0.0005	0.0021	<0.0005	<0.001
SA-AW-05	18-Jan-05	<0.0005	0.0017	0.0009	<0.01	<0.01	0.026	0.0029	<0.0005	0.01	0.0003 J	<0.01	<0.0005	0.0004 J	0.0033	0.0094	0.0035	0.0003 J
SA-AW-05	25-Jan-06	0.0009	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0038	<0.0005	<0.0005	0.0018	<0.0005	<0.001
SA-AW-05	17-Apr-09	0.0004 J	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0015	<0.0005	<0.0005	<0.01	0.0035	<0.0005	<0.0005	0.001	<0.0005	<0.001
SA-BW-01	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.01	0.14	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	13-Jan-00	<0.0005	<0.0005	<0.0005	<0.01	0.017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	22-Jan-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	10-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SA-BW-01	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SP-AH-21	03-Nov-00	<0.005	<0.005	<0.005	<0.01	<0.02	<0.005	<0.005	<0.005	0.021	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
SP-AH-21	16-Nov-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.02	<0.0005	<0.01	<0.0005	<0.0005	0.0019	0.0015	0.0006 J	<0.0005
DUP	16-Nov-00	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.019	<0.0005	<0.01	<0.0005	<0.0005	0.0015	0.0016	<0.001	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgL)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
SA-AW-04	21-Jan-04	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-04	18-Jan-05	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	18-Jan-05	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-04	25-Jan-06	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-04	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-05	14-Oct-99	<0.0005	0.0016	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	14-Oct-99	<0.0005	0.0016	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-05	19-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-05	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-05	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-05	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-05	18-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-05	09-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-05	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-05	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-05	18-Jan-05	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	0.0018	<0.0005	<0.001	<0.001	<0.001	0.0019	0.0003 J
SA-AW-05	25-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-AW-05	17-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	13-Jan-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	27-Apr-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	24-Jul-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	11-Oct-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	22-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	10-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	20-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	24-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	19-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	16-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	15-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SA-BW-01	26-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AH-21	03-Nov-00	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.01	<0.01	<0.005	<0.005
SP-AH-21	16-Nov-00	<0.0005	<0.0005	<0.0094	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	16-Nov-00	<0.0005	<0.0005	<0.0094	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
SA-AW-04	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-04	18-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	18-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-04	25-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-04	20-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-05	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-05	19-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-05	27-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-05	24-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-05	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-05	18-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-05	09-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-05	17-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	17-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-05	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-05	18-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	0.0004 J	0.0061	<0.01	<0.0005	0.0031	<0.0005	<0.0005
SA-AW-05	25-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-AW-05	17-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	14-Oct-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	13-Jan-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	27-Apr-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	24-Jul-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	11-Oct-00	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	22-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	10-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	17-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	21-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	20-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	0.0003 J	<0.0005	<0.0005
SA-BW-01	24-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	19-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	16-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	15-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SA-BW-01	26-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AH-21	03-Nov-00	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005
SP-AH-21	16-Nov-00	<0.0005	<0.0005	<0.0094	<0.0005	<0.0005	<0.0005	<0.01	<0.0094	na	<0.0005	<0.0005
DUP	16-Nov-00	<0.0005	<0.0005	<0.0094	<0.0005	<0.0005	<0.0005	<0.01	<0.0094	na	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total
SP-AW-06	18-Jan-01	<0.0005	0.0006	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.018	<0.0005	<0.01	<0.0005	<0.0005	0.0017	0.0024	<0.0005	<0.001
SP-AW-06	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.015	<0.0005	<0.01	<0.0005	<0.0005	0.0014	0.0028	<0.0005	<0.001
SP-AW-06	06-Jul-01	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.011	<0.0005	<0.01	<0.0005	<0.0005	0.0011	0.0037	<0.0005	<0.001
SP-AW-06	15-Oct-01	<0.0005	0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0011	0.0038	<0.0005	<0.001
SP-AW-06	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.012	<0.0005	<0.01	<0.0005	<0.0005	0.0013	0.002	<0.0005	<0.001
DUP	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.013	<0.0005	<0.01	<0.0005	<0.0005	0.0016	0.0016	<0.0005	<0.001
SP-AW-06	03-Apr-02	na	na	na	na	na	<0.001	na	na	na	<0.001	na	na	<0.001	na	na	na	<0.001
SP-AW-06	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.012	<0.0005	<0.01	0.0011	<0.0005	0.0011	0.0008	<0.0005	<0.001
SP-AW-06	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0095	<0.0005	<0.01	<0.0005	<0.0005	0.0009	0.0013	<0.0005	<0.001
SP-AW-06	04-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0053	<0.0005	<0.01	<0.0005	<0.0005	0.0005	0.001	<0.0005	<0.001
DUP	04-May-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0079	<0.0005	<0.01	<0.0005	<0.0005	0.0009	0.0015	<0.0005	<0.001
SP-AW-06	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0084	<0.0005	<0.01	<0.0005	<0.0005	0.0008	0.0013	<0.0005	<0.001
SP-AW-06	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0079	<0.0005	<0.01	<0.0005	<0.0005	0.0008	0.0012	<0.0005	<0.001
SP-AW-06	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0037	<0.0005	<0.01	<0.0005	<0.0005	0.0004 J	0.0015	<0.0005	<0.001
SP-AW-06	19-Apr-05	<0.0005	0.0003 J	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0082	<0.0005	<0.01	<0.0005	<0.0005	0.0011	0.001	<0.0005	<0.001
SP-AW-06	21-Jul-05	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.0005	0.0071	<0.0005	<0.01	<0.0005	<0.0005	0.0008	0.0009	<0.0005	<0.001
SP-AW-06	25-Jan-06	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.003	0.0045	<0.0005	<0.01	<0.0005	<0.0005	0.0012	0.0021	<0.0005	<0.001
SP-AW-06	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0084	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SP-AW-06	18-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0066	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	18-Apr-08	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.0084	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SP-AW-06	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.03	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
SP-AW-06	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.022	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
DUP	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	0.024	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mgLl)

Well Number	Date Sampled	1,1-DCA	1,1-DCE	1,2-DCB	1,1,2-TCA	1,1,2,2-Tetrachloro-ethane	1,2,3-Trichloro-propane	1,2,4-TMB	1,3,5-TMB	4-Methyl-2-penta-none	Bromo-benzene	Carbon Disulfide	Chloro-ethane	Chloro-methane	Dichloro-difluoro-methane	Iso-propyl-benzene	n-Butyl-benzene
SP-AW-06	18-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	09-Apr-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	06-Jul-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	15-Oct-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	08-Jan-02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-AW-06	17-Jan-03	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	20-Jan-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	04-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	04-May-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	15-Jul-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	14-Oct-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	18-Jan-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	19-Apr-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	21-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	25-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	20-Apr-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	18-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	18-Apr-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	14-Apr-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
SP-AW-06	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005
DUP	29-Apr-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	p-Iso-propyl-toluene	n-Propyl-benzene	Naph-thalene	Styrene	sec-Butyl-benzene	tert-Butyl-benzene	Vinyl Acetate	1,4-Dichloro-benzene	MTBE	2,2-Dichloro-propane	Bromodi-chlormethane
SP-AW-06	18-Jan-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	09-Apr-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	06-Jul-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	15-Oct-01	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	08-Jan-02	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	03-Apr-02	na	na	na	na	na	na	na	na	na	na	na
SP-AW-06	17-Jan-03	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	20-Jan-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	04-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	04-May-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	15-Jul-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	14-Oct-04	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	18-Jan-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	19-Apr-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	21-Jul-05	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	25-Jan-06	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
SP-AW-06	20-Apr-07	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0007
SP-AW-06	18-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0005 J
DUP	18-Apr-08	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0006
SP-AW-06	14-Apr-09	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	0.0008
SP-AW-06	29-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005
DUP	29-Apr-10	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005

All notes are listed at the end of this table; see last page.

Table D-2
Summary of Historical Volatile Organic Compounds (EPA Methods 8240 and 8260*) in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California

Concentrations reported in milligrams per liter (mg/L)

Well Number	Date Sampled	1,1,1-TCA	1,2-DCA	1,2-DCP	2-Hexa-none	Acetone	Benzene	Chloro-benzene	Chloro-form	cis-1,2-DCE	Ethyl-benzene	Methyl Ethyl Ketone	PCE	Toluene	trans-1,2-DCE	TCE	Vinyl Chloride	Xylenes, Total

Data QA/QC performed by EW.

Notes:

* = Analysis changed from EPA Method 8240 to EPA Method 8260 beginning in February-March 1998 (First Quarter 1998).

< = Analyte was not detected at or greater than the detection limit reported.

ND = Not detected (no associated detection limit was reported)

na = Not analyzed

DUP = Duplicate sample (field duplicate)

(a) Concentrations for LF-B1 may not represent B-zone water quality because LF-B1 is screened in the aquitard between the A- and B-zones.

(b) Concentrations for LF-B5 may not represent B-zone water quality because LF-B5 is screened in the aquitard between the A- and B- zones.

(c) SBPA well monitored by SLR consulting.

(d) SBPA well monitored by EKI personnel.

RPD = Relative percent difference.

Abbreviations for analytes:

1,1,1-TCA = 1,1,1-Trichloroethane
1,1,2-TCA = 1,1,2-Trichloroethane
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
1,2,4-TMB = 1,2,4-Trimethylbenzene
1,2-DCA = 1,2-Dichloroethane
1,2-DCB = 1,2-Dichlorobenzene
1,2-DCP = 1,2-Dichloropropane
1,3,5-TMB = 1,3,5-Trimethylbenzene
cis-1,2-DCE = cis-1,2-Dichloroethene
PCE = Tetrachloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
TCE = Trichloroethene
MTBE = Methl teritary-butyl ether

Data qualifiers:

J= Concentration is estimated.

J1= Concentration is estimated because the concentration exceeded the calibration range of the analytical instrument.

J2 = Concentration is estimated because the sample was analyzed outside of holding time.

J3 = Concentration is estimated because surrogate recoveries were outside of control limits.

J4 = Concentration is estimated because RPD was outside of control limit for laboratory control sample.

J10 = Concentration is estimated due to field duplicate RPD outside of control limit.

J11 = Concentration is estimated because it was reported at a concentration less than the detection limit.

R = Quantified as rejected.

U = Quantified as nondetect (U).

U5 = Quantified as nondetect (U) based on field blank contamination evaluation.

U6 = Quantified as nondetect (U) based on trip blank contamination evaluation.

U12 = Quantified as nondetect (U) based on source water contamination evaluation.

(1) = High responses were observed for sec-butylbenzene and p-isopropyltoluene in continuing calibration verification.

All notes are listed at the end of this table; see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
CDM-1		08-Dec-06	na	na	na
CDM-1		14-Feb-07	na	na	na
DUP		14-Feb-07	na	na	na
CDM-1		20-Apr-07	na	na	na
CDM-1		19-Jul-07	na	na	na
DUP		19-Jul-07	na	na	na
CDM-1		16-Apr-08	na	na	na
CDM-1		17-Apr-09	na	na	na
DUP		17-Apr-09	na	na	na
CDM-1		26-Apr-10	na	na	na
CDM-1		18-Apr-11	na	na	na
CDM-101		17-Apr-12	na	na	na
CDM-101		07-Oct-13	na	na	na
CDM-101		29-Oct-14	na	na	na
DUP		29-Oct-14	na	na	na
CDM-102		17-Apr-12	na	na	na
CDM-102		07-Oct-13	na	na	na
CDM-102		29-Oct-14	na	na	na
CDM-103		18-Apr-12	na	na	na
CDM-104		18-Apr-12	na	na	na
CDM-105		18-Apr-12	na	na	na
CDM-106		18-Apr-12	na	na	na
CDM-107		18-Apr-12	na	na	na
CDM-107		29-Oct-14	na	na	na
CDM-108		18-Apr-12	na	na	na
CDM-108		07-Oct-13	na	na	na
DUP		07-Oct-13	na	na	na
CDM-108		29-Oct-14	na	na	na
CDM-109		19-Apr-12	na	na	na
CDM-110		18-Apr-12	0.18	0.33	<0.30
DUP		18-Apr-12	0.15	0.35	<0.30
CDM-110		23-Apr-13	0.13 Y	0.34	<0.3
CDM-110		24-Apr-14	0.13 Y	0.26	<0.29
CDM-111		18-Apr-12	2.0	1.6	<0.30
CDM-111		23-Apr-13	2.5 Y	1.9	<0.3
CDM-111		24-Apr-14	0.59	0.99	<0.29

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
CDM-112		19-Apr-12	na	na	na
DUP		19-Apr-12	na	na	na
CDM-113		19-Apr-12	na	na	na
CDM-114		18-Apr-12	2.0	1.6	<0.30
CDM-114		23-Apr-13	1.7 Y	1.2	<0.3
DUP		23-Apr-13	1.6 Y	1.1	<0.3
CDM-114		24-Apr-14	0.39	0.69	<0.29
DUP		24-Apr-14	0.3	0.72	<0.3
EX-1		18-Apr-96	4.3	0.42	na
EX-1		01-Aug-96	4.1	0.22	na
EX-1		18-Dec-96	2.4	3.1	na
EX-1		15-Apr-97	0.99	7.1	na
EX-1		01-Jul-97	0.94	4.7	na
EX-1		22-Sep-97	1.4	0.32	na
EX-1		18-Dec-97	1.7	1.6	na
EX-1		27-Feb-98	0.8	1.8	na
EX-1		09-Apr-98	<0.25	<0.05	na
EX-1		23-Oct-98	<0.5	<0.05	na
EX-1		14-Jan-99	1.6	0.28	na
EX-1		23-Apr-99	1.1	0.15	na
EX-1		16-Jul-99	1 c,e	0.14	na
EX-1		13-Oct-99	0.41 e	0.08 d	na
EX-1		25-Jan-00	2.9 J	0.21	na
EX-1		26-Apr-00	na	na	na
EX-1		26-Jul-00	na	na	na
EX-1		09-Oct-00	na	na	na
EX-1		16-Jan-01	na	na	na
EX-1		16-Apr-01	na	na	na
EX-1		03-Jul-01	na	na	na
EX-1		16-Oct-01	na	na	na
EX-1		21-Jan-02	na	na	na
DUP		21-Jan-02	na	na	na
EX-1		09-Apr-02	na	na	na
EX-1		09-Jul-02	na	na	na
DUP		09-Jul-02	na	na	na
EX-1		12-Dec-02	na	na	na
EX-1		13-Jan-03	na	na	na
EX-1		16-Apr-03	na	na	na
EX-1		07-Jul-03	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
EX-1		29-Oct-03	na	na	na
EX-1		23-Jan-04	na	na	na
EX-1		05-May-04	na	na	na
EX-1		14-Jul-04	na	na	na
EX-1		11-Oct-04	na	na	na
EX-1		21-Jan-05	na	na	na
EX-1		20-Apr-05	na	na	na
EX-1		22-Jul-05	na	na	na
EX-1		26-Oct-05	na	na	na
EX-1		27-Jan-06	na	na	na
DUP		27-Jan-06	na	na	na
EX-1		20-Apr-06	na	na	na
EX-10		11-Sep-98	< 0.25	< 0.05	na
EX-10		22-Oct-98	< 0.05	2 J3	na
EX-10		14-Jan-99	1.4	1.1	na
EX-10		23-Apr-99	1.3	0.9	na
EX-10		15-Jul-99	0.5 c,f	0.47	na
EX-10		15-Oct-99	1.4 i	0.1 d	na
EX-10		12-Jan-00	0.98	0.63 J,d	na
EX-10		26-Apr-00	na	na	na
EX-10		26-Jul-00	na	na	na
EX-10		09-Oct-00	na	na	na
EX-10		16-Jan-01	na	na	na
EX-10		16-Apr-01	na	na	na
EX-10		03-Jul-01	na	na	na
EX-10		16-Oct-01	na	na	na
EX-10		16-Jan-02	na	na	na
DUP		16-Jan-02	na	na	na
EX-10		09-Apr-02	na	na	na
EX-10		09-Jul-02	na	na	na
EX-10		07-Nov-02	na	na	na
EX-10		13-Jan-03	na	na	na
EX-10		14-Apr-03	na	na	na
EX-10		07-Jul-03	na	na	na
DUP		07-Jul-03	na	na	na
EX-10		29-Oct-03	na	na	na
EX-10		23-Jan-04	na	na	na
EX-10		06-May-04	na	na	na
EX-10		14-Jul-04	na	na	na
DUP		14-Jul-04	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
EX-10		14-Oct-04	na	na	na
EX-10		21-Jan-05	na	na	na
EX-10		20-Apr-05	na	na	na
EX-10		22-Jul-05	na	na	na
DUP		22-Jul-05	na	na	na
EX-10		26-Oct-05	na	na	na
EX-10		27-Jan-06	na	na	na
DUP		27-Jan-06	na	na	na
EX-10		20-Apr-06	na	na	na
EX-10		17-Apr-07	na	na	na
EX-10		18-Apr-08	na	na	na
EX-10		17-Apr-09	na	na	na
EX-10		30-Apr-10	na	na	na
EX-11		16-Jul-99	4.2	0.25	na
EX-12		02-Jun-99	0.19	0.059	na
DUP		02-Jun-99	0.17	0.065	na
EX-12		13-Jul-99	0.24 c	< 0.05	na
EX-12		25-Oct-99	0.11 e	< 0.05	na
EX-13		02-Jun-99	1.3	0.25	na
EX-13		16-Jul-99	1.8 c,f	0.19	na
EX-14		08-Oct-99	0.71 c,e	0.099	na
DUP		08-Oct-99	0.79 c,e	0.095	na
EX-14		25-Jan-00	0.59 J	0.062 J,d	na
EX-14		26-Apr-00	na	na	na
EX-14		26-Jul-00	na	na	na
EX-14		09-Oct-00	na	na	na
EX-14		16-Jan-01	na	na	na
DUP		16-Jan-01	na	na	na
EX-14		13-Apr-01	na	na	na
EX-14		03-Jul-01	na	na	na
EX-14		12-Oct-01	na	na	na
EX-14		17-Jan-02	na	na	na
EX-14		09-Apr-02	na	na	na
EX-14		10-Jul-02	na	na	na
EX-14		18-Dec-02	na	na	na
EX-14		14-Jan-03	na	na	na
EX-14		14-Apr-03	na	na	na
EX-14		07-Jul-03	na	na	na
EX-14		29-Oct-03	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
EX-14		23-Jan-04	na	na	na
EX-14		06-May-04	na	na	na
EX-14		14-Jul-04	na	na	na
EX-14		14-Oct-04	na	na	na
EX-14		21-Jan-05	na	na	na
EX-14		20-Apr-05	na	na	na
EX-14		22-Jul-05	na	na	na
EX-14		26-Oct-05	na	na	na
DUP		26-Oct-05	na	na	na
EX-14		27-Jan-06	na	na	na
EX-14		20-Apr-06	na	na	na
EX-15		25-Jan-00	1.1 J	0.22 J,d	na
EX-15		26-Apr-00	na	na	na
DUP		26-Apr-00	na	na	na
EX-15		26-Jul-00	na	na	na
EX-15		09-Oct-00	na	na	na
EX-15		16-Jan-01	na	na	na
EX-15		13-Apr-01	na	na	na
EX-15		03-Jul-01	na	na	na
EX-15		12-Oct-01	na	na	na
EX-15		17-Jan-02	na	na	na
EX-15		09-Apr-02	na	na	na
EX-15		09-Jul-02	na	na	na
EX-15		18-Dec-02	na	na	na
EX-15		13-Jan-03	na	na	na
EX-15		14-Apr-03	na	na	na
EX-15		07-Jul-03	na	na	na
EX-15		29-Oct-03	na	na	na
EX-15		23-Jan-04	na	na	na
EX-15		06-May-04	na	na	na
EX-15		14-Jul-04	na	na	na
EX-15		14-Oct-04	na	na	na
EX-15		21-Jan-05	na	na	na
EX-15		20-Apr-05	na	na	na
EX-15		22-Jul-05	na	na	na
EX-15		26-Oct-05	na	na	na
EX-15		27-Jan-06	na	na	na
EX-15		20-Apr-06	na	na	na
EX-16		25-Jan-00	14 J	43	na
EX-16		26-Apr-00	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
EX-16		26-Jul-00	na	na	na
EX-16		09-Oct-00	na	na	na
EX-16		16-Jan-01	na	na	na
EX-16		13-Apr-01	na	na	na
EX-16		03-Jul-01	na	na	na
EX-16		12-Oct-01	na	na	na
EX-16		16-Jan-02	na	na	na
EX-16		12-Apr-02	na	na	na
DUP		12-Apr-02	na	na	na
EX-16		09-Jul-02	na	na	na
EX-16		07-Nov-02	na	na	na
DUP		07-Nov-02	na	na	na
EX-16		14-Jan-03	na	na	na
EX-16		14-Apr-03	na	na	na
EX-16		07-Jul-03	na	na	na
EX-16		29-Oct-03	na	na	na
EX-16		23-Jan-04	na	na	na
EX-16		06-May-04	na	na	na
DUP		06-May-04	na	na	na
EX-16		14-Jul-04	na	na	na
EX-16		14-Oct-04	na	na	na
EX-16		21-Jan-05	na	na	na
EX-16		20-Apr-05	na	na	na
EX-16		22-Jul-05	na	na	na
EX-16		26-Oct-05	na	na	na
EX-16		27-Jan-06	na	na	na
DUP		27-Jan-06	na	na	na
EX-16		20-Apr-06	na	na	na
EX-2		12-Jan-96	2	na	na
EX-2		18-Apr-96	1.3	41	na
EX-2		01-Aug-96	3.7	34	na
EX-2		18-Dec-96	0.69	45	na
EX-2		15-Apr-97	0.72	47	na
EX-2		01-Jul-97	0.64	70	na
EX-2		22-Sep-97	0.64	39	na
EX-2		22-Dec-97	0.55	10	na
EX-2		02-Mar-98	0.97	29.6	na
EX-2		09-Apr-98	< 0.5	31 J2	na
EX-2		23-Oct-98	< 0.5	< 0.05	na
EX-2		14-Jan-99	2.7	51	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
EX-2		23-Apr-99	1.6	10 J3	na
EX-2		15-Jul-99	0.51 c,e	0.35 J3	na
EX-2		14-Oct-99	0.35 i	0.29	na
EX-2		12-Jan-00	0.38	0.13 J,d	na
EX-2		26-Apr-00	na	na	na
EX-2		26-Jul-00	na	na	na
DUP		26-Jul-00	na	na	na
EX-2		09-Oct-00	na	na	na
EX-2		16-Jan-01	na	na	na
EX-2		16-Apr-01	na	na	na
EX-2		03-Jul-01	na	na	na
EX-2		12-Oct-01	na	na	na
EX-2		16-Jan-02	na	na	na
EX-2		09-Apr-02	na	na	na
EX-2		09-Jul-02	na	na	na
EX-2		08-Oct-02	na	na	na
EX-2		13-Jan-03	na	na	na
EX-2		14-Apr-03	na	na	na
EX-2		07-Jul-03	na	na	na
EX-2		29-Oct-03	na	na	na
EX-2		23-Jan-04	na	na	na
EX-2		06-May-04	na	na	na
EX-2		14-Jul-04	na	na	na
EX-2		11-Oct-04	na	na	na
EX-2		21-Jan-05	na	na	na
EX-2		20-Apr-05	na	na	na
EX-2		22-Jul-05	na	na	na
EX-2		26-Oct-05	na	na	na
EX-2		27-Jan-06	na	na	na
EX-2		20-Apr-06	na	na	na
EX-3		12-Jan-96	< 0.05	na	na
EX-3		18-Apr-96	0.43	< 0.05	na
EX-3		01-Aug-96	0.82	< 0.05	na
EX-3		18-Dec-96	0.21	< 0.05	na
EX-3		15-Apr-97	0.09	< 0.05	na
EX-3		01-Jul-97	0.13	< 0.05	na
EX-3		22-Sep-97	0.08	< 0.05	na
EX-3		19-Dec-97	0.18	0.22	na
EX-3		02-Mar-98	0.19	< 0.05	na
EX-3		09-Apr-98	< 5	< 0.05 UJ2	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
EX-3		22-Oct-98	< 0.25	< 0.05	na
DUP		22-Oct-98	< 0.25	< 0.05	na
EX-3		14-Jan-99	0.24	0.082	na
EX-3		23-Apr-99	0.1	0.14	na
EX-3		16-Jul-99	0.048 c,e	< 0.05	na
EX-3		13-Oct-99	0.12 c	< 0.05	na
EX-3		25-Jan-00	0.69 J	7	na
EX-3		26-Apr-00	na	na	na
EX-3		26-Jul-00	na	na	na
EX-3		09-Oct-00	na	na	na
DUP		09-Oct-00	na	na	na
EX-3		16-Jan-01	na	na	na
EX-3		13-Apr-01	na	na	na
EX-3		03-Jul-01	na	na	na
EX-3		12-Oct-01	na	na	na
EX-3		16-Jan-02	na	na	na
EX-3		09-Apr-02	na	na	na
EX-3		30-Aug-02	na	na	na
EX-3		08-Oct-02	na	na	na
EX-3		13-Jan-03	na	na	na
EX-3		16-Apr-03	na	na	na
EX-3		07-Jul-03	na	na	na
EX-3		29-Oct-03	na	na	na
EX-3		23-Jan-04	na	na	na
EX-3		06-May-04	na	na	na
EX-3		14-Jul-04	na	na	na
EX-3		11-Oct-04	na	na	na
EX-3		21-Jan-05	na	na	na
EX-3		20-Apr-05	na	na	na
EX-3		22-Jul-05	na	na	na
EX-3		26-Oct-05	na	na	na
EX-3		27-Jan-06	na	na	na
EX-3		20-Apr-06	na	na	na
EX-4		11-Sep-98	< 0.05	< 0.05	na
EX-4		22-Oct-98	< 0.1	< 0.05	na
EX-4		14-Jan-99	1.4	0.24	na
DUP		14-Jan-99	1.7	0.25	na
EX-4		23-Apr-99	0.94	0.46 J3	na
EX-4		15-Jul-99	0.83 c,e	0.38	na
EX-4		15-Oct-99	0.6 i	0.22	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
EX-4		12-Jan-00	0.57	0.15	na
EX-4		26-Apr-00	na	na	na
EX-4		26-Jul-00	na	na	na
EX-4		09-Oct-00	na	na	na
EX-4		16-Jan-01	na	na	na
EX-4		16-Apr-01	na	na	na
EX-4		03-Jul-01	na	na	na
EX-4		16-Oct-01	na	na	na
EX-4		09-Jan-02	na	na	na
EX-4		09-Apr-02	na	na	na
EX-4		09-Jul-02	na	na	na
EX-4		12-Dec-02	na	na	na
EX-4		13-Jan-03	na	na	na
EX-4		14-Apr-03	na	na	na
EX-4		08-Jul-03	na	na	na
EX-4		29-Oct-03	na	na	na
DUP		29-Oct-03	na	na	na
EX-4		23-Jan-04	na	na	na
EX-4		06-May-04	na	na	na
EX-4		14-Jul-04	na	na	na
EX-4		11-Oct-04	na	na	na
DUP		11-Oct-04	na	na	na
EX-4		21-Jan-05	na	na	na
EX-4		20-Apr-05	na	na	na
EX-4		22-Jul-05	na	na	na
EX-4		26-Oct-05	na	na	na
EX-4		27-Jan-06	na	na	na
EX-4		20-Apr-06	na	na	na
EX-5		11-Sep-98	< 0.05	< 0.05	na
EX-5		22-Oct-98	< 0.05	0.38	na
EX-5		14-Jan-99	2.6	0.41	na
EX-5		23-Apr-99	2.8	5.4 J3	na
EX-5		19-Jul-99	3.8 c,i	0.18 d	na
EX-5		15-Oct-99	1.5	0.39	na
EX-5		12-Jan-00	1.3	1.9 J	na
EX-5		26-Apr-00	na	na	na
EX-5		26-Jul-00	na	na	na
EX-5		09-Oct-00	na	na	na
EX-5		16-Jan-01	na	na	na
EX-5		16-Apr-01	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
EX-5		03-Jul-01	na	na	na
DUP		03-Jul-01	na	na	na
EX-5		16-Oct-01	na	na	na
EX-5		21-Jan-02	na	na	na
EX-5		09-Apr-02	na	na	na
EX-5		09-Jul-02	na	na	na
EX-5		08-Oct-02	na	na	na
EX-5		13-Jan-03	na	na	na
EX-5		14-Apr-03	na	na	na
EX-5		07-Jul-03	na	na	na
EX-5		29-Oct-03	na	na	na
EX-5		23-Jan-04	na	na	na
EX-5		06-May-04	na	na	na
EX-5		14-Jul-04	na	na	na
EX-5		14-Oct-04	na	na	na
EX-5		21-Jan-05	na	na	na
EX-5		20-Apr-05	na	na	na
EX-5		22-Jul-05	na	na	na
EX-5		26-Oct-05	na	na	na
EX-5		27-Jan-06	na	na	na
EX-5		20-Apr-06	na	na	na
EX-6		11-Sep-98	< 0.05	11	na
DUP		11-Sep-98	< 0.05	< 0.5	na
EX-6		22-Oct-98	< 0.5	7.8	na
EX-6		15-Jan-99	1.9	24	na
EX-6		23-Apr-99	1.5	4.1 J3	na
DUP		23-Apr-99	1.4	4.1 J3	na
EX-6		19-Jul-99	1.2 c,f	0.34 d	na
EX-6		12-Oct-99	2.4 e,f	2.5	na
EX-6		21-Jan-00	1.4 J	8.9 J,d	na
EX-6		26-Apr-00	na	na	na
EX-6		26-Jul-00	na	na	na
DUP		26-Jul-00	na	na	na
EX-6		09-Oct-00	na	na	na
EX-6		16-Jan-01	na	na	na
EX-6		13-Apr-01	na	na	na
EX-6		03-Jul-01	na	na	na
EX-6		16-Oct-01	na	na	na
EX-6		16-Jan-02	na	na	na
EX-6		09-Apr-02	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
EX-6		09-Jul-02	na	na	na
EX-6		10-Oct-02	na	na	na
EX-6		13-Jan-03	na	na	na
DUP		13-Jan-03	na	na	na
EX-6		14-Apr-03	na	na	na
DUP		14-Apr-03	na	na	na
EX-6		07-Jul-03	na	na	na
EX-6		29-Oct-03	na	na	na
EX-6		23-Jan-04	na	na	na
DUP		23-Jan-04	na	na	na
EX-6		06-May-04	na	na	na
EX-6		14-Jul-04	na	na	na
EX-6		11-Oct-04	na	na	na
EX-6		21-Jan-05	na	na	na
EX-6		20-Apr-05	na	na	na
EX-6		22-Jul-05	na	na	na
EX-6		26-Oct-05	na	na	na
EX-6		27-Jan-06	na	na	na
EX-6		20-Apr-06	na	na	na
EX-6		17-Apr-07	na	na	na
EX-6		18-Apr-08	na	na	na
EX-6		17-Apr-09	na	na	na
EX-6		27-Apr-10	na	na	na
EX-7		11-Sep-98	< 0.25	< 0.5	na
EX-7		22-Oct-98	< 0.25	1.3	na
EX-7		14-Jan-99	1.1	5.3	na
EX-7		23-Apr-99	0.94	3.9 J3	na
EX-7		15-Jul-99	0.32 c,f	0.48 J3	na
EX-7		15-Oct-99	< 0.048	< 0.05	na
EX-7		19-Jan-00	0.61	1.4 J	na
EX-7		26-Apr-00	na	na	na
EX-7		26-Jul-00	na	na	na
EX-7		09-Oct-00	na	na	na
EX-7		16-Jan-01	na	na	na
EX-7		13-Apr-01	na	na	na
EX-7		03-Jul-01	na	na	na
EX-7		16-Oct-01	na	na	na
DUP		16-Oct-01	na	na	na
EX-7		16-Jan-02	na	na	na
EX-7		09-Apr-02	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
EX-7		15-Aug-02	na	na	na
EX-7		07-Nov-02	na	na	na
EX-7		13-Jan-03	na	na	na
EX-7		14-Apr-03	na	na	na
EX-7		07-Jul-03	na	na	na
EX-7		29-Oct-03	na	na	na
EX-7		23-Jan-04	na	na	na
EX-7		06-May-04	na	na	na
EX-7		14-Jul-04	na	na	na
EX-7		14-Oct-04	na	na	na
EX-7		21-Jan-05	na	na	na
EX-7		20-Apr-05	na	na	na
EX-7		22-Jul-05	na	na	na
EX-7		26-Oct-05	na	na	na
EX-7		27-Jan-06	na	na	na
DUP		27-Jan-06	na	na	na
EX-7		20-Apr-06	na	na	na
DUP		20-Apr-06	na	na	na
EX-7		17-Apr-07	na	na	na
EX-7		18-Apr-08	na	na	na
EX-7		17-Apr-09	na	na	na
EX-7		30-Apr-10	na	na	na
DUP		30-Apr-10	na	na	na
EX-8		11-Sep-98	< 0.25	< 25	na
EX-8		22-Oct-98	< 0.5	< 5	na
EX-8		14-Jan-99	2.7	26	na
EX-8		23-Apr-99	6.8	120	na
EX-8		19-Jul-99	6.5 cfi	69 d	na
EX-8		15-Oct-99	4.2 f,i	25	na
EX-8		21-Jan-00	3.1 J	31 J,d	na
EX-8		26-Apr-00	na	na	na
EX-8		26-Jul-00	na	na	na
EX-8		09-Oct-00	na	na	na
EX-8		16-Jan-01	na	na	na
EX-8		16-Apr-01	na	na	na
DUP		16-Apr-01	na	na	na
EX-8		03-Jul-01	na	na	na
EX-8		16-Oct-01	na	na	na
EX-8		09-Jan-02	na	na	na
EX-8		10-Apr-02	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
EX-8		18-Dec-02	na	na	na
EX-8		13-Jan-03	na	na	na
EX-8		14-Apr-03	na	na	na
EX-8		07-Jul-03	na	na	na
EX-8		29-Oct-03	na	na	na
EX-8		23-Jan-04	na	na	na
EX-8		05-May-04	na	na	na
EX-8		14-Jul-04	na	na	na
EX-8		14-Oct-04	na	na	na
EX-8		21-Jan-05	na	na	na
EX-8		20-Apr-05	na	na	na
EX-8		22-Jul-05	na	na	na
EX-8		26-Oct-05	na	na	na
EX-8		27-Jan-06	na	na	na
EX-8		20-Apr-06	na	na	na
EX-8		18-Apr-07	na	na	na
EX-8		18-Apr-08	na	na	na
EX-8		17-Apr-09	na	na	na
EX-8		30-Apr-10	na	na	na
EX-9		11-Sep-98	< 0.05	< 1	na
EX-9		22-Oct-98	< 0.05	< 0.5 UJ2	na
EX-9		14-Jan-99	0.73	6.9	na
EX-9		23-Apr-99	0.64	19 J3	na
EX-9		15-Jul-99	0.22 c,f	5.5 J3	na
EX-9		14-Oct-99	0.19 c,f	1.2	na
EX-9		21-Jan-00	0.36 J	0.76 J,d	na
DUP		21-Jan-00	0.41 J	1.7 J,d	na
EX-9		26-Apr-00	na	na	na
EX-9		26-Jul-00	na	na	na
EX-9		09-Oct-00	na	na	na
EX-9		16-Jan-01	na	na	na
EX-9		13-Apr-01	na	na	na
EX-9		03-Jul-01	na	na	na
EX-9		12-Oct-01	na	na	na
EX-9		21-Jan-02	na	na	na
EX-9		09-Apr-02	na	na	na
EX-9		30-Aug-02	na	na	na
EX-9		12-Dec-02	na	na	na
EX-9		13-Jan-03	na	na	na
EX-9		14-Apr-03	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
EX-9		07-Jul-03	na	na	na
EX-9		29-Oct-03	na	na	na
EX-9		23-Jan-04	na	na	na
EX-9		06-May-04	na	na	na
EX-9		14-Jul-04	na	na	na
EX-9		14-Oct-04	na	na	na
EX-9		21-Jan-05	na	na	na
EX-9		20-Apr-05	na	na	na
EX-9		22-Jul-05	na	na	na
EX-9		26-Oct-05	na	na	na
EX-9		27-Jan-06	na	na	na
EX-9		20-Apr-06	na	na	na
EX-9		17-Apr-07	na	na	na
EX-9		18-Apr-08	na	na	na
EX-9		17-Apr-09	na	na	na
EX-9		30-Apr-10	na	na	na
LF-1		21-Jun-91	< 0.05	na	na
LF-1		09-Jul-92	0.11	< 0.05	na
LF-1		09-Jun-93	0.083	< 0.05	na
LF-10		21-Jun-91	0.27	na	na
LF-10		18-Dec-91	0.990	na	na
DUP		18-Dec-91	0.570	na	na
LF-10		09-Jul-92	0.42	0.7	na
LF-10		31-Dec-92	0.33	0.19	na
DUP		31-Dec-92	0.37	0.18	na
LF-10		09-Jun-93	0.47	0.18	na
LF-10		06-Jan-94	1.5	0.2	na
DUP		06-Jan-94	1.2	0.2	na
LF-10		27-Feb-98	0.86	0.56	na
LF-10		15-Jan-99	2.4	0.45	na
LF-10		18-Jan-00	1.1 J	0.95 J,d	na
LF-10		23-Jan-01	na	na	na
LF-10		08-Jan-02	na	na	na
LF-10		16-Jan-03	na	na	na
LF-10		22-Jan-04	na	na	na
LF-10		20-Jan-05	na	na	na
LF-10		24-Jan-06	na	na	na
LF-10		17-Apr-07	na	na	na
DUP		17-Apr-07	na	na	na
LF-10		16-Apr-08	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-10		15-Apr-09	na	na	na
LF-10		26-Apr-10	na	na	na
LF-11		21-Jun-91	0.13	na	na
DUP		21-Jun-91	0.12	na	na
LF-11		17-Dec-91	0.410	na	na
LF-11		09-Jul-92	0.26	< 0.05	na
LF-11		31-Dec-92	0.31	0.058	na
LF-11		09-Jun-93	0.27	< 0.05	na
LF-11		05-Jan-94	0.8	0.06	na
LF-11		16-Apr-96	0.93	< 0.05	na
LF-11		31-Jul-96	0.58	< 0.05	na
LF-11		20-Nov-96	1.5	< 0.05	na
LF-11		18-Mar-97	1.9	0.19	na
DUP		18-Mar-97	1.8	< 0.05	na
LF-11		11-Jun-97	0.41	0.17	na
LF-11		19-Aug-97	0.47	0.16	na
DUP		19-Aug-97	0.41	0.15	na
LF-11		17-Dec-97	< 0.05	0.22	na
LF-11		02-Mar-98	0.64	2.2	na
LF-11		10-Apr-98	< 0.25	2	na
DUP		10-Apr-98	< 0.25	2.6	na
LF-11		16-Jul-98	< 0.05	< 0.05	na
LF-11		23-Oct-98	< 0.05	< 0.05	na
LF-11		14-Jan-99	0.66	0.15	na
LF-11		22-Apr-99	0.76	< 0.05	na
DUP		22-Apr-99	0.71	< 0.05	na
LF-11		16-Jul-99	1.1 e	0.12	na
LF-11		12-Oct-99	0.74 e	0.095 d	na
DUP		12-Oct-99	0.67 e	0.11 d	na
LF-11		20-Jan-00	0.51 J	< 0.05	na
LF-11		01-May-00	na	na	na
LF-11		24-Jul-00	na	na	na
LF-11		11-Oct-00	na	na	na
LF-11		22-Jan-01	na	na	na
LF-11		10-Apr-01	na	na	na
DUP		10-Apr-01	na	na	na
LF-11		06-Jul-01	na	na	na
LF-11		16-Oct-01	na	na	na
LF-11		09-Jan-02	na	na	na
LF-11		10-Apr-02	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-11		09-Jul-02	na	na	na
LF-11		10-Oct-02	na	na	na
LF-11		20-Jan-03	na	na	na
LF-11		16-Apr-03	na	na	na
LF-11		10-Jul-03	na	na	na
LF-11		28-Oct-03	na	na	na
LF-11		21-Jan-04	na	na	na
LF-11		04-May-04	na	na	na
LF-11		15-Jul-04	na	na	na
LF-11		11-Oct-04	na	na	na
LF-11		20-Jan-05	na	na	na
LF-11		20-Apr-05	na	na	na
DUP		20-Apr-05	na	na	na
LF-11		21-Jul-05	na	na	na
LF-11		26-Oct-05	na	na	na
LF-11		24-Jan-06	na	na	na
LF-11		07-Jul-06	na	na	na
LF-11		19-Apr-07	na	na	na
LF-11		16-Apr-08	na	na	na
LF-11		15-Apr-09	na	na	na
LF-11		27-Apr-10	na	na	na
LF-12		19-Jun-91	< 0.05	na	na
LF-12		16-Dec-91	< 0.050	na	na
LF-12		08-Jul-92	< 0.05	< 0.05	na
LF-12		30-Dec-92	< 0.05	< 0.05	na
LF-12		08-Jun-93	0.099	< 0.05	na
LF-12		06-Jan-94	< 0.05	< 0.05	na
LF-12		16-Apr-96	< 0.05	< 0.05	na
LF-12		30-Jul-96	< 0.05	< 0.05	na
LF-12		20-Nov-96	< 0.05	< 0.05	na
LF-12		17-Mar-97	< 0.05	< 0.05	na
LF-12		01-Jul-97	< 0.05	< 0.05	na
DUP		01-Jul-97	< 0.05	< 0.05	na
LF-12		20-Aug-97	< 0.05	< 0.05	na
LF-12		18-Dec-97	< 0.05	< 0.05	na
LF-12		26-Feb-98	0.15	< 0.05	na
LF-12		08-Apr-98	< 0.05	< 0.05	na
LF-12		14-Jul-98	< 0.05	< 0.05	na
LF-12		21-Oct-98	< 0.05	< 0.05	na
LF-12		12-Jan-99	< 0.048	< 0.05	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-12		20-Apr-99	< 0.048	< 0.05	na
LF-12		14-Jul-99	< 0.05	< 0.05	na
LF-12		11-Oct-99	< 0.049	< 0.05	na
LF-12		18-Jan-00	< 0.05	< 0.05	na
LF-12		24-Jan-01	na	na	na
LF-12		09-Jan-02	na	na	na
LF-12		16-Jan-03	na	na	na
LF-12		20-Jan-04	na	na	na
LF-12		18-Jan-05	na	na	na
LF-12		26-Jan-06	na	na	na
LF-12		17-Apr-07	na	na	na
LF-12		18-Apr-08	na	na	na
LF-12		13-Apr-09	na	na	na
DUP		13-Apr-09	na	na	na
LF-12		29-Apr-10	na	na	na
LF-12		18-Apr-12	0.064 Y	< 0.05	0.97
LF-12		23-Apr-13	< 0.05	< 0.05	0.7
LF-12		24-Apr-14	< 0.052	< 0.05	0.7
LF-13		19-Jun-91	< 0.05	na	na
LF-13		16-Dec-91	< 0.050	na	na
LF-13		08-Jul-92	< 0.05	< 0.05	na
LF-13		30-Dec-92	< 0.05	< 0.05	na
LF-13		08-Jun-93	0.052	< 0.05	na
LF-13		05-Jan-94	< 0.05	< 0.05	na
LF-13		16-Apr-96	< 0.05	< 0.05	na
LF-13		30-Jul-96	< 0.05	< 0.05	na
DUP		30-Jul-96	< 0.05	< 0.05	na
LF-13		20-Nov-96	< 0.05	< 0.05	na
LF-13		17-Mar-97	< 0.05	< 0.05	na
DUP		17-Mar-97	< 0.05	< 0.05	na
LF-13		12-Jun-97	< 0.05	< 0.05	na
LF-13		19-Aug-97	< 0.05	< 0.05	na
LF-13		18-Dec-97	< 0.05	< 0.05	na
LF-13		25-Feb-98	< 0.05	< 0.05	na
LF-13		07-Apr-98	< 0.05	< 0.05	na
DUP		07-Apr-98	< 0.05	< 0.05	na
LF-13		13-Jul-98	< 0.05	< 0.05	na
LF-13		19-Oct-98	< 0.05	< 0.05	na
LF-13		11-Jan-99	< 0.048	< 0.05	na
LF-13		19-Apr-99	< 0.047	< 0.05	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
DUP		19-Apr-99	< 0.047	< 0.05	na
LF-13		13-Jul-99	< 0.048	< 0.05	na
LF-13		12-Oct-99	< 0.051	< 0.05	na
LF-13		14-Jan-00	< 0.05	< 0.05	na
LF-13		18-Jan-01	na	na	na
LF-13		10-Jan-02	na	na	na
DUP		10-Jan-02	na	na	na
LF-13		16-Jan-03	na	na	na
DUP		16-Jan-03	na	na	na
LF-13		20-Jan-04	na	na	na
LF-13		18-Jan-05	na	na	na
LF-13		25-Jan-06	na	na	na
LF-13		16-Apr-07	na	na	na
DUP		16-Apr-07	na	na	na
LF-13		13-Apr-09	na	na	na
LF-14		20-Jun-91	< 0.05	na	na
LF-14		17-Dec-91	0.086	na	na
LF-14		09-Jul-92	0.18	< 0.05	na
LF-14		31-Dec-92	0.19	0.068	na
LF-14		09-Jun-93	0.24	< 0.05	na
LF-15		20-Jun-91	< 0.05	na	na
LF-15		17-Dec-91	< 0.050	na	na
LF-15		08-Jul-92	< 0.05	< 0.05	na
LF-15		30-Dec-92	< 0.05	< 0.05	na
LF-15		09-Jun-93	0.098	< 0.05	na
LF-16		20-Jun-91	< 0.05	na	na
LF-16		17-Dec-91	0.094	na	na
LF-16		09-Jul-92	0.075	< 0.05	na
LF-16		30-Dec-92	< 0.05	0.05	na
LF-16		09-Jun-93	0.083	< 0.05	na
LF-17		02-Mar-98	11	3.2	na
LF-17		10-Apr-98	< 0.5	< 0.5	na
LF-17		16-Jul-98	< 1	< 1	na
LF-17		23-Oct-98	< 0.5	< 0.5	na
LF-17		15-Jan-99	19	4.7	na
LF-17		22-Apr-99	18	8.1	na
LF-17		16-Jul-99	23 f	3.9 h	na
LF-17		13-Oct-99	15 e,f	3.9 h	na
DUP		13-Oct-99	15 e,f	4.2 h	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-17		20-Jan-00	21 J	9.2 Jdh	na
LF-17		23-Jan-01	na	na	na
LF-17		10-Jan-02	na	na	na
LF-17		20-Jan-03	na	na	na
LF-17		22-Jan-04	na	na	na
LF-17		20-Jan-05	na	na	na
LF-17		24-Jan-06	na	na	na
LF-17		18-Apr-07	na	na	na
LF-17		15-Apr-08	na	na	na
LF-17		15-Apr-09	na	na	na
LF-17		26-Apr-10	na	na	na
DUP		26-Apr-10	na	na	na
LF-18		11-Apr-96	0.32	< 0.05	na
LF-18		30-Jul-96	0.32	< 0.05	na
LF-18		20-Nov-96	0.5	< 0.05	na
LF-18		19-Mar-97	0.26	< 0.05	na
LF-18		11-Jun-97	0.18	< 0.05	na
DUP		11-Jun-97	0.18	< 0.05	na
LF-18		19-Aug-97	0.31	< 0.05	na
LF-18		17-Dec-97	0.21	< 0.05	na
LF-18		27-Feb-98	0.1	< 0.05	na
LF-18		08-Apr-98	< 0.05	< 0.05	na
LF-18		15-Jul-98	< 0.05	< 0.05	na
DUP		15-Jul-98	< 0.05	< 0.05	na
LF-18		21-Oct-98	< 0.05	< 0.05	na
LF-18		13-Jan-99	0.29	< 0.05	na
LF-18		21-Apr-99	0.31	< 0.05	na
DUP		21-Apr-99	0.26	< 0.05	na
LF-18		14-Jul-99	0.28 c,e	< 0.05	na
LF-18		13-Oct-99	0.64 e	0.057 d	na
LF-18		19-Jan-00	0.17	< 0.05	na
LF-18		22-Jan-01	na	na	na
LF-18		10-Jan-02	na	na	na
LF-18		20-Jan-03	na	na	na
LF-18		21-Jan-04	na	na	na
LF-18		19-Jan-05	na	na	na
LF-18		24-Jan-06	na	na	na
LF-18		20-Apr-07	na	na	na
LF-18		14-Apr-08	na	na	na
LF-18		16-Apr-09	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-18		27-Apr-10	na	na	na
LF-18		16-Apr-12	na	na	na
DUP		16-Apr-12	na	na	na
LF-19		13-Jun-97	0.6	0.07	na
LF-19		19-Aug-97	0.78	0.15	na
LF-19		27-Feb-98	0.69	0.19	na
LF-19		08-Apr-98	< 0.05	< 0.05	na
LF-19		15-Jul-98	< 0.05	< 0.05	na
LF-19		23-Oct-98	< 0.05	< 0.05	na
DUP		23-Oct-98	< 0.05	< 0.05	na
LF-19		13-Jan-99	2.2	0.17	na
LF-19		20-Apr-99	3.3	0.16	na
LF-19		14-Jul-99	2.7 cei	0.2	na
LF-19		15-Oct-99	2.1 c,e	0.17 d	na
LF-20		11-Apr-96	0.96	0.23	na
LF-20		30-Jul-96	0.56	0.2	na
LF-20		21-Nov-96	3.2	0.25	na
LF-20		18-Mar-97	0.61	0.2	na
LF-20		11-Jun-97	0.54	0.2	na
LF-20		19-Aug-97	0.67	0.22	na
LF-20		18-Dec-97	0.79	< 0.05	na
LF-20		27-Feb-98	0.74	0.43	na
LF-20		09-Apr-98	< 0.05	< 0.05	na
DUP		09-Apr-98	< 0.05	< 0.05	na
LF-20		16-Jul-98	< 0.05	0.51	na
LF-20		23-Oct-98	< 0.05	< 0.05	na
LF-20		13-Jan-99	1.7	0.51	na
DUP		13-Jan-99	1.7	0.53	na
LF-20		21-Apr-99	1.8	0.5	na
LF-20		15-Jul-99	1.5	0.45	na
LF-20		14-Oct-99	1.2	0.44 d	na
LF-20		20-Jan-00	0.98 J	0.53 Jd	na
LF-20		01-May-00	na	na	na
LF-20		24-Jul-00	na	na	na
LF-20		11-Oct-00	na	na	na
LF-20		22-Jan-01	na	na	na
LF-20		10-Apr-01	na	na	na
LF-20		06-Jul-01	na	na	na
LF-20		15-Oct-01	na	na	na
LF-20		09-Jan-02	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-20		09-Apr-02	na	na	na
LF-20		09-Jul-02	na	na	na
LF-20		10-Oct-02	na	na	na
LF-20		20-Jan-03	na	na	na
LF-20		16-Apr-03	na	na	na
LF-20		09-Jul-03	na	na	na
LF-20		28-Oct-03	na	na	na
LF-20		21-Jan-04	na	na	na
LF-20		04-May-04	na	na	na
LF-20		15-Jul-04	na	na	na
LF-20		11-Oct-04	na	na	na
LF-20		19-Jan-05	na	na	na
LF-20		19-Apr-05	na	na	na
DUP		19-Apr-05	na	na	na
LF-20		21-Jul-05	na	na	na
LF-20		26-Oct-05	na	na	na
LF-20		24-Jan-06	na	na	na
LF-20		19-Apr-06	na	na	na
DUP		19-Apr-06	na	na	na
LF-20		17-Apr-07	na	na	na
LF-20		14-Apr-08	na	na	na
LF-20		17-Apr-09	na	na	na
LF-20		27-Apr-10	na	na	na
DUP		27-Apr-10	v	na	na
LF-21		10-Apr-96	2.8	< 0.05	na
LF-21		31-Jul-96	1.4	0.06	na
LF-21		21-Nov-96	2.4	0.06	na
LF-21		18-Mar-97	1.7	< 0.05	na
LF-21		11-Jun-97	0.83	< 0.05	na
LF-21		19-Aug-97	0.78	< 0.05	na
LF-21		17-Dec-97	1	< 0.05	na
LF-21		02-Mar-98	3	< 0.05	na
DUP		02-Mar-98	3.2	< 0.05	na
LF-21		09-Apr-98	< 0.05	< 0.05	na
LF-21		16-Jul-98	< 0.05	< 0.05 UJ3	na
LF-21		23-Oct-98	< 0.05	< 0.05	na
LF-21		14-Jan-99	1.4	< 0.05	na
LF-21		22-Apr-99	11	< 0.05	na
LF-21		15-Jul-99	6.1 c,e	< 0.05	na
DUP		15-Jul-99	5 c,e	< 0.05	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-21		12-Oct-99	1.9 c,e	< 0.05	na
LF-21		20-Jan-00	0.47 J	< 0.05	na
LF-21		27-Apr-00	na	na	na
LF-21		24-Jul-00	na	na	na
LF-21		11-Oct-00	na	na	na
LF-21		23-Jan-01	na	na	na
DUP		23-Jan-01	na	na	na
LF-21		10-Apr-01	na	na	na
LF-21		06-Jul-01	na	na	na
LF-21		18-Oct-01	na	na	na
LF-21		09-Jan-02	na	na	na
LF-21		08-Apr-02	na	na	na
LF-21		09-Jul-02	na	na	na
LF-21		10-Oct-02	na	na	na
LF-21		16-Jan-03	na	na	na
LF-21		16-Apr-03	na	na	na
DUP		16-Apr-03	na	na	na
LF-21		09-Jul-03	na	na	na
LF-21		28-Oct-03	na	na	na
LF-21		21-Jan-04	na	na	na
LF-21		04-May-04	na	na	na
LF-21		15-Jul-04	na	na	na
LF-21		14-Oct-04	na	na	na
DUP		14-Oct-04	na	na	na
LF-21		20-Jan-05	na	na	na
LF-21		19-Apr-05	na	na	na
LF-21		21-Jul-05	na	na	na
LF-21		26-Oct-05	na	na	na
LF-21		23-Jan-06	na	na	na
LF-21		19-Apr-06	na	na	na
LF-21		19-Apr-07	na	na	na
LF-22		02-Mar-98	0.06	< 0.05	na
LF-22		10-Apr-98	< 0.05	< 0.05	na
LF-22		15-Jan-99	< 0.048	< 0.05	na
LF-22		20-Jan-00	< 0.05	< 0.05	na
LF-22		02-Feb-01	na	na	na
LF-22		08-Jan-02	na	na	na
LF-22		20-Jan-03	na	na	na
LF-22		22-Jan-04	na	na	na
LF-22		20-Jan-05	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-22		25-Jan-06	na	na	na
LF-22		18-Apr-07	na	na	na
LF-22		15-Apr-08	na	na	na
LF-22		17-Apr-09	na	na	na
LF-22		30-Apr-10	na	na	na
LF-23		10-Apr-96	1.7	< 0.05	na
DUP		10-Apr-96	1.3	< 0.05	na
LF-23		02-Aug-96	5.6	< 0.05	na
LF-23		21-Nov-96	1.3	< 0.05	na
LF-23		18-Mar-97	1.5	< 0.05	na
LF-23		11-Jun-97	0.41	< 0.05	na
LF-23		20-Aug-97	0.29	< 0.05	na
LF-23		18-Dec-97	0.3	< 0.05	na
LF-23		26-Feb-98	0.56	< 0.05	na
LF-23		08-Apr-98	< 0.05	< 0.05	na
LF-23		15-Jul-98	< 0.05	< 0.05	na
LF-23		21-Oct-98	< 0.05	< 0.05	na
LF-23		12-Jan-99	0.26	< 0.05	na
LF-23		21-Apr-99	0.42	< 0.05	na
LF-23		14-Jul-99	0.39 c,e	< 0.05	na
LF-23		21-Jul-00	na	na	na
LF-23		11-Oct-00	na	na	na
LF-24		11-Apr-96	0.09	< 0.05	na
LF-24		02-Aug-96	0.16	< 0.05	na
LF-24		21-Nov-96	0.14	< 0.05	na
LF-24		18-Mar-97	< 0.05	< 0.05	na
LF-24		11-Jun-97	0.06	< 0.05	na
LF-24		20-Aug-97	0.06	< 0.05	na
LF-24		18-Dec-97	0.06	< 0.05	na
LF-24		26-Feb-98	0.05	< 0.05	na
LF-24		08-Apr-98	< 0.05	< 0.05	na
LF-24		15-Jul-98	< 0.05	< 0.05	na
LF-24		21-Oct-98	< 0.05	< 0.05	na
LF-24		12-Jan-99	< 0.047	< 0.05	na
LF-24		21-Apr-99	0.09	< 0.05	na
LF-24		14-Jul-99	< 0.048	< 0.05	na
LF-24		21-Jul-00	na	na	na
DUP		21-Jul-00	na	na	na
LF-24		11-Oct-00	na	na	na
LF-24		19-Apr-07	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-24		15-Apr-08	na	na	na
LF-24		16-Apr-09	na	na	na
LF-24		23-Feb-12	na	na	na
LF-24		16-Apr-12	na	na	na
LF-25		11-Apr-96	0.18	< 0.05	na
LF-25		02-Aug-96	0.3	< 0.05	na
LF-25		21-Nov-96	0.31	< 0.05	na
LF-25		18-Mar-97	0.11	< 0.05	na
LF-25		11-Jun-97	0.11	< 0.05	na
LF-25		20-Aug-97	0.13	< 0.05	na
LF-25		18-Dec-97	0.15	< 0.05	na
LF-25		26-Feb-98	0.31	< 0.05	na
LF-25		08-Apr-98	< 0.05	< 0.05	na
LF-25		15-Jul-98	< 0.05	< 0.05	na
LF-25		21-Oct-98	< 0.05	< 0.05	na
LF-25		12-Jan-99	0.14	0.054	na
LF-25		21-Apr-99	0.2	0.071	na
LF-25		14-Jul-99	0.11 c,e	0.091	na
LF-25		21-Jul-00	na	na	na
LF-25		11-Oct-00	na	na	na
LF-25		19-Apr-07	na	na	na
LF-25		15-Apr-08	na	na	na
DUP		15-Apr-08	na	na	na
LF-25		16-Apr-09	na	na	na
LF-25		23-Feb-12	na	na	na
LF-25		16-Apr-12	na	na	na
LF-26		27-Feb-98	0.51	0.39	na
LF-26		09-Apr-98	< 0.05	< 0.05	na
LF-26		16-Jul-98	< 0.05	0.29 J3	na
LF-26		23-Oct-98	< 0.05	< 0.05	na
LF-26		13-Jan-99	1.5	0.36	na
LF-26		21-Apr-99	1.2	0.23	na
DUP		15-Jul-99	1.2	0.22	na
LF-26		14-Oct-99	1	0.26 d	na
LF-26		20-Jan-00	1.1 J	0.3 Jd	na
DUP		20-Jan-00	1.2 J	0.28 Jd	na
LF-26		22-Jan-01	na	na	na
LF-26		09-Jan-02	na	na	na
LF-26		20-Jan-03	na	na	na
LF-26		21-Jan-04	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-26		19-Jan-05	na	na	na
LF-26		26-Jan-06	na	na	na
LF-26		17-Apr-07	na	na	na
LF-26		14-Apr-08	na	na	na
LF-26		16-Apr-09	na	na	na
LF-26		26-Apr-10	na	na	na
LF-26		18-Apr-11	na	na	na
DUP		18-Apr-11	na	na	na
LF-27		29-Dec-97	< 0.05	< 0.05	na
LF-27		26-Feb-98	< 0.05	< 0.05	na
LF-27		08-Apr-98	< 0.05	< 0.05	na
LF-27		14-Jul-98	< 0.05	< 0.05	na
LF-27		21-Oct-98	< 0.05	< 0.05	na
LF-27		12-Jan-99	< 0.047	< 0.05	na
LF-27		20-Apr-99	< 0.048	< 0.05	na
LF-27		14-Jul-99	< 0.048	< 0.05	na
DUP		14-Jul-99	< 0.048	< 0.05	na
LF-27		11-Oct-99	< 0.048	< 0.05	na
LF-27		17-Jan-00	< 0.05	< 0.05	na
DUP		17-Jan-00	< 0.05	< 0.05	na
LF-27		24-Jan-01	na	na	na
LF-27		09-Apr-01	na	na	na
LF-27		09-Jan-02	na	na	na
LF-27		16-Jan-03	na	na	na
LF-27		20-Jan-04	na	na	na
LF-27		14-Jul-04	na	na	na
DUP		14-Jul-04	na	na	na
LF-27		18-Jan-05	na	na	na
LF-27		26-Jan-06	na	na	na
LF-27		17-Apr-07	na	na	na
LF-27		15-Apr-08	na	na	na
LF-27		13-Apr-09	na	na	na
LF-27		29-Apr-10	na	na	na
LF-28		29-Dec-97	0.13	0.08	na
LF-28		26-Feb-98	< 0.05	0.065	na
LF-28		08-Apr-98	< 0.25	< 0.05	na
LF-28		14-Jul-98	< 0.25	< 0.05	na
LF-28		21-Oct-98	< 0.25	< 0.05	na
LF-28		12-Jan-99	0.25	0.11	na
DUP		12-Jan-99	0.27 ci	0.11	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-28		20-Apr-99	0.33	0.079	na
LF-28		14-Jul-99	0.33 i	0.088	na
LF-28		11-Oct-99	0.33 i	0.09 d	na
LF-28		17-Jan-00	0.44 J	0.1 J,d	na
LF-28		28-Apr-00	na	na	na
LF-28		25-Jul-00	na	na	na
LF-28		10-Oct-00	na	na	na
LF-28		24-Jan-01	na	na	na
LF-28		09-Apr-01	na	na	na
LF-28		05-Jul-01	na	na	na
LF-28		15-Oct-01	na	na	na
LF-28		09-Jan-02	na	na	na
LF-28		09-Apr-02	na	na	na
LF-28		08-Jul-02	na	na	na
LF-28		09-Oct-02	na	na	na
LF-28		16-Jan-03	na	na	na
LF-28		16-Apr-03	na	na	na
LF-28		09-Jul-03	na	na	na
LF-28		29-Oct-03	na	na	na
LF-28		20-Jan-04	na	na	na
LF-28		04-May-04	na	na	na
LF-28		15-Jul-04	na	na	na
LF-28		13-Oct-04	na	na	na
LF-28		18-Jan-05	na	na	na
LF-28		20-Apr-05	na	na	na
LF-28		19-Jul-05	na	na	na
DUP		19-Jul-05	na	na	na
LF-28		27-Oct-05	na	na	na
DUP		27-Oct-05	na	na	na
LF-28		27-Jan-06	na	na	na
LF-28		18-Apr-06	na	na	na
LF-28		16-Apr-07	na	na	na
LF-28		17-Apr-08	na	na	na
LF-28		13-Apr-09	na	na	na
LF-28		29-Apr-10	na	na	na
LF-28		12-Oct-11	na	na	na
LF-28		18-Apr-12	0.14 Y	< 0.05	< 0.30
LF-28		23-Apr-13	0.1 Y	0.021 J	< 0.3
LF-28		24-Apr-14	0.097 Y	0.017 J	< 0.31
LF-29		29-Dec-97	1.1	0.8	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-29		25-Feb-98	0.57	1.2	na
LF-29		07-Apr-98	< 0.25	< 0.05	na
LF-29		14-Jul-98	< 0.25	< 0.05	na
LF-29		20-Oct-98	< 0.25	< 0.05	na
LF-29		11-Jan-99	0.95	0.9	na
LF-29		20-Apr-99	1	1.1	na
DUP		20-Apr-99	0.77	1.1	na
LF-29		13-Jul-99	0.99 c	0.95	na
LF-29		11-Oct-99	1.1 c,f	1.3 d	na
DUP		11-Oct-99	0.94 c,f	1.2 d	na
LF-29		17-Jan-00	0.85 J	1.4 J,d	na
LF-29		24-Jan-01	na	na	na
LF-29		09-Jan-02	na	na	na
LF-29		17-Jan-03	na	na	na
LF-29		20-Jan-04	na	na	na
LF-29		18-Jan-05	na	na	na
LF-29		26-Jan-06	na	na	na
LF-29		16-Apr-07	na	na	na
LF-29		15-Apr-08	na	na	na
LF-29		13-Apr-09	na	na	na
LF-29		29-Apr-10	na	na	na
LF-3		21-Jun-91	2	na	na
LF-3		09-Jul-92	3	190	na
DUP		09-Jul-92	3.3	180	na
LF-3		09-Jun-93	100	150	na
DUP		09-Jun-93	110	150	na
LF-3		16-Apr-96	2.6	87	na
LF-3		31-Jul-96	0.64	90	na
LF-3		20-Nov-96	9.3	75	na
LF-3		19-Mar-97	0.65	61	na
LF-3		12-Jun-97	1.1	130	na
LF-3		19-Aug-97	0.97	200	na
LF-3		17-Dec-97	1.1	30	na
DUP		17-Dec-97	1.6	43	na
LF-3		02-Mar-98	1.3	167	na
LF-3		10-Apr-98	< 0.5	47 J1	na
LF-3		16-Jul-98	< 1	< 12	na
LF-3		19-Oct-98	< 2.5	150	na
LF-3		15-Jan-99	10	110	na
DUP		15-Jan-99	10	110	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-3		22-Apr-99	6.3	58	na
LF-3		19-Jul-99	14 cef	100 d	na
LF-3		12-Oct-99	13 e,f	210	na
LF-3		20-Jan-00	3.1 J	49 Jg	na
LF-3		01-May-00	na	na	na
LF-3		24-Jul-00	na	na	na
LF-3		11-Oct-00	na	na	na
LF-3		16-Jan-01	na	na	na
LF-3		13-Apr-01	na	na	na
LF-3		06-Jul-01	na	na	na
LF-3		15-Oct-01	na	na	na
LF-3		10-Jan-02	na	na	na
LF-3		10-Apr-02	na	na	na
LF-3		09-Jul-02	na	na	na
LF-3		10-Oct-02	na	na	na
LF-3		20-Jan-03	na	na	na
LF-3		16-Apr-03	na	na	na
LF-3		10-Jul-03	na	na	na
LF-3		28-Oct-03	na	na	na
DUP		28-Oct-03	na	na	na
LF-3		22-Jan-04	na	na	na
LF-3		05-May-04	na	na	na
LF-3		15-Jul-04	na	na	na
LF-3		11-Oct-04	na	na	na
LF-3		20-Jan-05	na	na	na
LF-3		20-Apr-05	na	na	na
LF-3		21-Jul-05	na	na	na
LF-3		26-Oct-05	na	na	na
LF-3		24-Jan-06	na	na	na
LF-3		19-Apr-06	na	na	na
LF-3		18-Apr-07	na	na	na
LF-3		15-Apr-08	na	na	na
LF-3		15-Apr-09	na	na	na
LF-3		26-Apr-10	na	na	na
LF-30		30-Dec-97	0.24	< 0.05	na
LF-30		25-Feb-98	0.11	0.14	na
DUP		25-Feb-98	0.14	0.18	na
LF-30		07-Apr-98	< 0.05	< 0.05	na
LF-30		14-Jul-98	< 0.05	< 0.05	na
LF-30		20-Oct-98	< 0.05	< 0.05	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-30		11-Jan-99	0.2	0.34	na
LF-30		20-Apr-99	0.12	0.18	na
LF-30		13-Jul-99	0.29 c	0.28	na
LF-30		11-Oct-99	0.11 c,e	0.19 d	na
LF-30		18-Jan-00	0.23 J	0.24 J,d	na
LF-30		24-Jan-01	na	na	na
LF-30		09-Jan-02	na	na	na
LF-30		10-Apr-02	na	na	na
LF-30		17-Jan-03	na	na	na
LF-30		20-Jan-04	na	na	na
LF-30		18-Jan-05	na	na	na
LF-30		26-Jan-06	na	na	na
LF-31		02-Jun-99	0.14	< 0.05	na
LF-31		13-Jul-99	0.27 c,i	< 0.05	na
LF-31		11-Oct-99	0.21 i	< 0.05	na
LF-32		22-Jun-99	< 0.047	< 0.05	na
LF-32		16-Jul-99	0.13 c,e	< 0.05	na
LF-32		25-Oct-99	< 0.05	< 0.05	na
DUP		25-Oct-99	< 0.05	< 0.05	na
LF-33		22-Jun-99	1.5 cfi	0.16	na
DUP		22-Jun-99	1.5 cfi	0.16	na
LF-33		13-Jul-99	1.5 c,i	0.1	na
LF-33		11-Oct-99	0.63 i	0.2 d	na
LF-34		22-Jun-99	0.18 c,i	< 0.05	na
LF-34		13-Jul-99	0.25 c,i	0.051	na
LF-34		11-Oct-99	0.16 i	< 0.05	na
LF-35		25-Oct-99	< 0.05	< 0.05	na
LF-35		14-Jan-00	< 0.05	< 0.05	na
LF-35		28-Apr-00	na	na	na
LF-35		25-Jul-00	na	na	na
DUP		25-Jul-00	na	na	na
LF-35		10-Oct-00	na	na	na
LF-35		17-Jan-01	na	na	na
LF-35		13-Apr-01	na	na	na
LF-35		05-Jul-01	na	na	na
LF-35		15-Oct-01	na	na	na
LF-35		08-Jan-02	na	na	na
DUP		08-Jan-02	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-35		08-Apr-02	na	na	na
DUP		08-Apr-02	na	na	na
LF-35		08-Jul-02	na	na	na
LF-35		07-Oct-02	na	na	na
LF-35		15-Jan-03	na	na	na
LF-35		15-Apr-03	na	na	na
LF-35		09-Jul-03	na	na	na
LF-35		27-Oct-03	na	na	na
LF-35		19-Jan-04	na	na	na
LF-35		04-May-04	na	na	na
LF-35		14-Jul-04	na	na	na
LF-35		13-Oct-04	na	na	na
LF-35		17-Jan-05	na	na	na
LF-35		18-Apr-05	na	na	na
DUP		18-Apr-05	na	na	na
LF-35		18-Jul-05	na	na	na
LF-35		24-Oct-05	na	na	na
LF-35		23-Jan-06	na	na	na
LF-35		17-Apr-06	na	na	na
LF-35		18-Apr-07	na	na	na
LF-35		17-Apr-08	na	na	na
LF-35		14-Apr-09	na	na	na
LF-35		30-Apr-10	na	na	na
LF-35		17-Apr-12	na	na	na
LF-36		13-Jan-00	0.18 J	< 0.05	na
LF-36		28-Apr-00	na	na	na
LF-36		25-Jul-00	na	na	na
LF-36		10-Oct-00	na	na	na
LF-36		17-Jan-01	na	na	na
LF-36		09-Apr-01	na	na	na
LF-36		02-Jul-01	na	na	na
LF-36		12-Oct-01	na	na	na
LF-36		08-Jan-02	na	na	na
LF-36		09-Apr-02	na	na	na
LF-36		08-Jul-02	na	na	na
LF-36		09-Oct-02	na	na	na
LF-36		14-Jan-03	na	na	na
LF-36		15-Apr-03	na	na	na
LF-36		08-Jul-03	na	na	na
LF-36		27-Oct-03	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-36		19-Jan-04	na	na	na
LF-36		03-May-04	na	na	na
LF-36		12-Jul-04	na	na	na
DUP		12-Jul-04	na	na	na
LF-36		14-Oct-04	na	na	na
LF-36		17-Jan-05	na	na	na
LF-36		19-Apr-05	na	na	na
LF-36		19-Jul-05	na	na	na
LF-36		27-Oct-05	na	na	na
LF-36		27-Jan-06	na	na	na
LF-36		18-Apr-06	na	na	na
LF-36		19-Apr-07	na	na	na
LF-36		17-Apr-08	na	na	na
DUP		17-Apr-08	na	na	na
LF-36		14-Apr-09	na	na	na
LF-36		28-Apr-10	na	na	na
LF-36		15-Apr-11	na	na	na
LF-36		21-Jul-11	na	na	na
LF-36		12-Oct-11	na	na	na
DUP		12-Oct-11	na	na	na
LF-36		23-Feb-12	na	na	na
LF-36		17-Apr-12	na	na	na
LF-37		14-Jan-00	0.38 J	0.29 J,d	na
DUP		14-Jan-00	0.63 J	0.28 J,d	na
LF-37		28-Apr-00	na	na	na
DUP		28-Apr-00	na	na	na
LF-37		25-Jul-00	na	na	na
LF-37		10-Oct-00	na	na	na
LF-37		17-Jan-01	na	na	na
LF-37		10-Apr-01	na	na	na
LF-37		05-Jul-01	na	na	na
LF-37		12-Oct-01	na	na	na
LF-37		08-Jan-02	na	na	na
LF-37		08-Apr-02	na	na	na
LF-37		08-Jul-02	na	na	na
DUP		08-Jul-02	na	na	na
LF-37		10-Oct-02	na	na	na
DUP		10-Oct-02	na	na	na
LF-37		15-Jan-03	na	na	na
LF-37		15-Apr-03	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-37		08-Jul-03	na	na	na
DUP		08-Jul-03	na	na	na
LF-37		27-Oct-03	na	na	na
DUP		27-Oct-03	na	na	na
LF-37		19-Jan-04	na	na	na
LF-37		03-May-04	na	na	na
LF-37		12-Jul-04	na	na	na
LF-37		13-Oct-04	na	na	na
LF-37		19-Jan-05	na	na	na
LF-37		18-Apr-05	na	na	na
LF-37		18-Jul-05	na	na	na
LF-37		24-Oct-05	na	na	na
LF-37		23-Jan-06	na	na	na
LF-37		18-Apr-06	na	na	na
LF-37		19-Apr-07	na	na	na
LF-37		16-Apr-08	na	na	na
LF-37		14-Apr-09	na	na	na
LF-37		30-Apr-10	na	na	na
LF-37		17-Apr-12	na	na	na
LF-38		14-Jan-00	0.079 J	0.18 J,d	na
LF-38		28-Apr-00	na	na	na
LF-38		25-Jul-00	na	na	na
LF-38		10-Oct-00	na	na	na
DUP		10-Oct-00	na	na	na
LF-38		17-Jan-01	na	na	na
DUP		17-Jan-01	na	na	na
LF-38		10-Apr-01	na	na	na
LF-38		05-Jul-01	na	na	na
LF-38		12-Oct-01	na	na	na
LF-38		08-Jan-02	na	na	na
LF-38		08-Apr-02	na	na	na
LF-38		08-Jul-02	na	na	na
LF-38		10-Oct-02	na	na	na
LF-38		15-Jan-03	na	na	na
DUP		15-Jan-03	na	na	na
LF-38		15-Apr-03	na	na	na
LF-38		08-Jul-03	na	na	na
LF-38		27-Oct-03	na	na	na
LF-38		19-Jan-04	na	na	na
LF-38		03-May-04	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-38		12-Jul-04	na	na	na
LF-38		13-Oct-04	na	na	na
LF-38		19-Jan-05	na	na	na
LF-38		18-Apr-05	na	na	na
LF-38		18-Jul-05	na	na	na
LF-38		24-Oct-05	na	na	na
LF-38		23-Jan-06	na	na	na
LF-38		18-Apr-06	na	na	na
LF-38		19-Apr-07	na	na	na
LF-38		16-Apr-08	na	na	na
LF-38		14-Apr-09	na	na	na
LF-38		28-Apr-10	na	na	na
LF-38		17-Apr-12	na	na	na
DUP		17-Apr-12	na	na	na
LF-39		14-Jan-00	< 0.05	< 0.05	na
LF-39		28-Apr-00	na	na	na
LF-39		25-Jul-00	na	na	na
LF-39		10-Oct-00	na	na	na
LF-39		24-Jan-01	na	na	na
LF-39		09-Apr-01	na	na	na
LF-39		05-Jul-01	na	na	na
LF-39		15-Oct-01	na	na	na
LF-39		08-Jan-02	na	na	na
LF-39		08-Apr-02	na	na	na
LF-39		08-Jul-02	na	na	na
LF-39		09-Oct-02	na	na	na
LF-39		14-Jan-03	na	na	na
DUP		14-Jan-03	na	na	na
LF-39		15-Apr-03	na	na	na
LF-39		08-Jul-03	na	na	na
LF-39		28-Oct-03	na	na	na
LF-39		19-Jan-04	na	na	na
LF-39		03-May-04	na	na	na
LF-39		12-Jul-04	na	na	na
LF-39		13-Oct-04	na	na	na
LF-39		17-Jan-05	na	na	na
LF-39		18-Apr-05	na	na	na
LF-39		18-Jul-05	na	na	na
LF-39		27-Oct-05	na	na	na
LF-39		23-Jan-06	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-39		17-Apr-06	na	na	na
LF-39		18-Apr-07	na	na	na
LF-39		17-Apr-08	na	na	na
LF-39		15-Apr-09	na	na	na
LF-39		28-Apr-10	na	na	na
LF-39		17-Apr-12	na	na	na
LF-4		21-Jun-91	0.78	na	na
DUP		21-Jun-91	0.51	na	na
LF-4		09-Jul-92	1.2	14	na
LF-4		09-Jun-93	1.2	2.2	na
LF-4		02-Mar-98	2.8	2.6	na
LF-4		09-Apr-98	< 0.5	< 0.05	na
LF-4		16-Jul-98	< 0.05	< 0.05	na
LF-4		19-Oct-98	< 0.05	< 0.05	na
LF-4		14-Jan-99	13	1.9	na
LF-4		22-Apr-99	6.3	0.74 J3	na
LF-4		16-Jul-99	2.2 e	0.49	na
DUP		16-Jul-99	2.2 e	0.5	na
LF-4		15-Oct-99	1.2 f	0.37 d	na
LF-4		25-Jan-00	2.8 J	0.75 J,d	na
DUP		25-Jan-00	3.7 J	0.74 J,d	na
LF-4		25-Jan-01	na	na	na
LF-4		08-Jan-02	na	na	na
LF-4		20-Jan-03	na	na	na
LF-4		22-Jan-04	na	na	na
LF-4		20-Jan-05	na	na	na
LF-4		25-Jan-06	na	na	na
LF-4		18-Apr-07	na	na	na
DUP		18-Apr-07	na	na	na
LF-4		14-Apr-08	na	na	na
LF-4		16-Apr-09	na	na	na
LF-4		26-Apr-10	na	na	na
LF-40		14-Jan-00	0.39	< 0.05	na
LF-40		28-Apr-00	na	na	na
LF-40		25-Jul-00	na	na	na
LF-40		10-Oct-00	na	na	na
LF-40		24-Jan-01	na	na	na
LF-40		09-Apr-01	na	na	na
DUP		09-Apr-01	na	na	na
LF-40		05-Jul-01	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-40		15-Oct-01	na	na	na
LF-40		08-Jan-02	na	na	na
LF-40		08-Apr-02	na	na	na
LF-40		08-Jul-02	na	na	na
LF-40		09-Oct-02	na	na	na
LF-40		14-Jan-03	na	na	na
LF-40		15-Apr-03	na	na	na
LF-40		08-Jul-03	na	na	na
LF-40		28-Oct-03	na	na	na
LF-40		19-Jan-04	na	na	na
LF-40		03-May-04	na	na	na
DUP		03-May-04	na	na	na
LF-40		12-Jul-04	na	na	na
LF-40		13-Oct-04	na	na	na
LF-40		17-Jan-05	na	na	na
LF-40		18-Apr-05	na	na	na
LF-40		18-Jul-05	na	na	na
LF-40		27-Oct-05	na	na	na
LF-40		23-Jan-06	na	na	na
LF-40		17-Apr-06	na	na	na
DUP		17-Apr-06	na	na	na
LF-40		18-Apr-07	na	na	na
LF-40		17-Apr-08	na	na	na
LF-40		15-Apr-09	na	na	na
LF-40		28-Apr-10	na	na	na
LF-40		17-Apr-12	na	na	na
LF-41		13-Jan-00	0.059 J	<0.05	na
DUP		13-Jan-00	0.053 J	<0.05	na
LF-41		28-Apr-00	na	na	na
LF-41		25-Jul-00	na	na	na
LF-41		10-Oct-00	na	na	na
DUP		10-Oct-00	na	na	na
LF-41		17-Jan-01	na	na	na
LF-41		09-Apr-01	na	na	na
LF-41		05-Jul-01	na	na	na
LF-41		12-Oct-01	na	na	na
LF-41		08-Jan-02	na	na	na
LF-41		08-Apr-02	na	na	na
LF-41		08-Jul-02	na	na	na
LF-41		09-Oct-02	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-41		15-Jan-03	na	na	na
LF-41		15-Apr-03	na	na	na
LF-41		09-Jul-03	na	na	na
LF-41		27-Oct-03	na	na	na
LF-41		19-Jan-04	na	na	na
LF-41		03-May-04	na	na	na
LF-41		12-Jul-04	na	na	na
LF-41		13-Oct-04	na	na	na
LF-41		17-Jan-05	na	na	na
LF-41		19-Apr-05	na	na	na
DUP		19-Apr-05	na	na	na
LF-41		19-Jul-05	na	na	na
LF-41		24-Oct-05	na	na	na
LF-41		23-Jan-06	na	na	na
DUP		23-Jan-06	na	na	na
LF-41		17-Apr-06	na	na	na
LF-41		15-Apr-11	na	na	na
LF-41		21-Jul-11	na	na	na
LF-41		19-Oct-11	na	na	na
LF-41		23-Feb-12	na	na	na
LF-41		17-Apr-12	na	na	na
LF-42		12-Jan-00	1.1	0.19 J,d	na
DUP		12-Jan-00	1.4	0.18 J,d	na
LF-42		01-May-00	na	na	na
DUP		01-May-00	na	na	na
LF-42		24-Jul-00	na	na	na
LF-42		11-Oct-00	na	na	na
LF-42		25-Jan-01	na	na	na
LF-42		10-Apr-01	na	na	na
LF-42		06-Jul-01	na	na	na
DUP		06-Jul-01	na	na	na
LF-42		15-Oct-01	na	na	na
LF-42		09-Jan-02	na	na	na
LF-42		09-Apr-02	na	na	na
DUP		09-Apr-02	na	na	na
LF-42		09-Jul-02	na	na	na
LF-42		10-Oct-02	na	na	na
LF-42		17-Jan-03	na	na	na
LF-42		16-Apr-03	na	na	na
LF-42		09-Jul-03	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-42		28-Oct-03	na	na	na
LF-42		22-Jan-04	na	na	na
LF-42		04-May-04	na	na	na
LF-42		15-Jul-04	na	na	na
LF-42		14-Oct-04	na	na	na
LF-42		19-Jan-05	na	na	na
DUP		19-Jan-05	na	na	na
LF-42		19-Apr-05	na	na	na
LF-42		19-Jul-05	na	na	na
LF-42		26-Oct-05	na	na	na
LF-42		24-Jan-06	na	na	na
LF-42		19-Apr-06	na	na	na
LF-42		19-Apr-07	na	na	na
LF-42		14-Apr-08	na	na	na
LF-42		16-Apr-09	na	na	na
DUP		16-Apr-09	na	na	na
LF-42		26-Apr-10	na	na	na
LF-42		17-Apr-12	na	na	na
LF-5		06-Aug-91	4.7	na	na
LF-5		09-Jul-92	0.83	69	na
LF-5		09-Jun-93	2	95	na
LF-7		20-Jun-91	< 0.05	na	na
LF-7		17-Dec-91	0.540	na	na
LF-7		09-Jul-92	0.3	0.14	na
DUP		09-Jul-92	0.48	0.13	na
LF-7		09-Jun-93	0.34	0.11	na
DUP		09-Jun-93	0.32	0.1	na
LF-7		06-Jan-94	0.54	0.5	na
LF-7		27-Feb-98	0.79	0.14	na
DUP		27-Feb-98	0.88	0.14	na
LF-7		13-Jan-99	0.53	0.16	na
LF-7		20-Jan-00	0.89	0.24 Jd	na
LF-7		25-Jan-01	na	na	na
LF-7		09-Jan-02	na	na	na
LF-7		17-Jan-03	na	na	na
LF-7		22-Jan-04	na	na	na
LF-7		19-Jan-05	na	na	na
LF-7		24-Jan-06	na	na	na
LF-7		19-Apr-07	na	na	na
LF-7		14-Apr-08	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
DUP		14-Apr-08	na	na	na
LF-7		16-Apr-09	na	na	na
LF-7		27-Apr-10	na	na	na
LF-8		20-Jun-91	< 0.05	na	na
LF-8		17-Dec-91	0.220	na	na
LF-8		09-Jul-92	0.25	< 0.05	na
LF-8		30-Dec-92	0.15	0.12	na
LF-8		09-Jun-93	0.33	< 0.05	na
LF-8		06-Jan-94	1.7	< 0.05	na
LF-8		27-Feb-98	0.2	< 0.05	na
LF-8		08-Apr-98	< 0.05	< 0.05	na
LF-8		15-Jul-98	< 0.05	< 0.05	na
LF-8		21-Oct-98	< 0.05	< 0.05	na
LF-8		13-Jan-99	0.44	0.053	na
LF-8		21-Apr-99	0.43	< 0.05	na
LF-8		14-Jul-99	0.39 c,e	0.053	na
LF-8		15-Oct-99	0.2	< 0.05	na
LF-8		19-Jan-00	0.29	< 0.05	na
LF-8		22-Jan-01	na	na	na
LF-8		09-Jan-02	na	na	na
LF-8		20-Jan-03	na	na	na
DUP		20-Jan-03	na	na	na
LF-8		21-Jan-04	na	na	na
LF-8		19-Jan-05	na	na	na
LF-8		24-Jan-06	na	na	na
LF-8		20-Apr-07	na	na	na
LF-8		14-Apr-08	na	na	na
LF-8		16-Apr-09	na	na	na
LF-8		26-Apr-10	na	na	na
LF-9		21-Jun-91	0.2	na	na
LF-9		16-Dec-91	0.600	na	na
LF-9		09-Jul-92	0.3	0.62	na
LF-9		30-Dec-92	0.3	0.51	na
LF-9		09-Jun-93	0.56	0.43	na
LF-B1	(a)	20-Jun-91	< 0.05	na	na
LF-B1	(a)	16-Dec-91	< 0.050	na	na
LF-B1	(a)	08-Jul-92	< 0.05	0.18	na
LF-B1	(a)	30-Dec-92	< 0.05	0.2	na
LF-B1	(a)	08-Jun-93	0.061	0.18	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-B2		21-Jun-91	< 0.05	na	na
LF-B2		16-Dec-91	< 0.050	na	na
LF-B2		08-Jul-92	< 0.05	< 0.05	na
LF-B2		08-Jun-93	< 0.05	< 0.05	na
LF-B3		19-Jun-91	< 0.05	na	na
LF-B3		16-Dec-91	< 0.050	na	na
LF-B3		08-Jul-92	< 0.05	0.14	na
LF-B3		30-Dec-92	< 0.05	0.15	na
LF-B3		08-Jun-93	0.06	0.09	na
LF-B3		05-Jan-94	< 0.05	< 0.05	na
LF-B3		16-Apr-96	2.7	< 0.05	na
LF-B3		01-Aug-96	0.6	< 0.05	na
LF-B3		21-Nov-96	0.44	< 0.05	na
DUP		21-Nov-96	0.53	< 0.05	na
LF-B3		17-Mar-97	0.85	< 0.05	na
LF-B3		12-Jun-97	0.93	0.06	na
LF-B3		20-Aug-97	0.2	0.06	na
LF-B3		17-Dec-97	0.7	< 0.05	na
LF-B3		27-Feb-98	0.42	< 0.05	na
LF-B3		08-Apr-98	< 0.05	< 0.05	na
LF-B3		15-Jul-98	< 0.05	< 0.05	na
LF-B3		21-Oct-98	< 0.05 UJ3	< 0.05	na
LF-B3		13-Jan-99	0.39	< 0.05	na
LF-B3		22-Apr-99	1.3	< 0.05	na
LF-B3		15-Jul-99	0.11 c,e	< 0.05	na
LF-B3		14-Oct-99	0.18 c,e	< 0.05	na
LF-B3		25-Jan-00	2.6 J	< 0.05	na
LF-B3		25-Jan-01	na	na	na
LF-B3		15-Oct-01	na	na	na
DUP		15-Oct-01	na	na	na
LF-B3		10-Jan-02	na	na	na
LF-B3		16-Jan-03	na	na	na
LF-B3		21-Jan-04	na	na	na
DUP		21-Jan-04	na	na	na
LF-B3		20-Jan-05	na	na	na
LF-B3		24-Jan-06	na	na	na
LF-B3		19-Apr-07	na	na	na
LF-B3		16-Apr-08	na	na	na
LF-B3		15-Apr-09	na	na	na
LF-B3		30-Apr-10	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-B4		19-Jun-91	< 0.05	na	na
LF-B4		17-Dec-91	< 0.050	na	na
LF-B4		08-Jul-92	< 0.05	< 0.05	na
LF-B4		30-Dec-92	< 0.05	0.16	na
LF-B4		08-Jun-93	0.066	< 0.05	na
LF-B4		05-Jan-94	< 0.05	< 0.05	na
LF-B4		16-Apr-96	< 0.05	< 0.05	na
LF-B4		30-Jul-96	< 0.05	< 0.05	na
LF-B4		22-Nov-96	0.16	< 0.05	na
DUP		22-Nov-96	< 0.05	< 0.05	na
LF-B4		17-Mar-97	< 0.05	< 0.05	na
LF-B4		01-Jul-97	< 0.05	< 0.05	na
LF-B4		20-Aug-97	< 0.05	< 0.05	na
LF-B4		18-Dec-97	< 0.05	< 0.05	na
LF-B4		25-Feb-98	< 0.05	< 0.05	na
LF-B4		07-Apr-98	< 0.05	< 0.05	na
LF-B4		15-Jul-98	< 0.05	< 0.05	na
LF-B4		19-Oct-98	< 0.05	< 0.05	na
LF-B4		11-Jan-99	0.055	< 0.05	na
LF-B4		20-Apr-99	0.05	< 0.05	na
LF-B4		14-Jul-99	< 0.048	< 0.05	na
LF-B4		14-Oct-99	0.12 i	< 0.05	na
LF-B4		18-Jan-00	< 0.05	< 0.05	na
LF-B4		24-Jan-01	na	na	na
DUP		24-Jan-01	na	na	na
LF-B4		09-Jan-02	na	na	na
LF-B4		16-Jan-03	na	na	na
LF-B4		21-Jan-04	na	na	na
LF-B4		18-Jan-05	na	na	na
DUP		18-Jan-05	na	na	na
LF-B4		26-Jan-06	na	na	na
LF-B4		16-Apr-07	na	na	na
LF-B4		13-Apr-09	na	na	na
LF-B5	(b)	09-Apr-96	0.1	< 0.05	na
LF-B5	(b)	01-Aug-96	< 0.05	0.15	na
LF-B5	(b)	22-Nov-96	< 0.05	0.06	na
LF-B5	(b)	17-Mar-97	< 0.05	0.12	na
LF-B5	(b)	12-Jun-97	< 0.05	0.09	na
LF-B5	(b)	20-Aug-97	< 0.05	0.12	na
LF-B5	(b)	17-Dec-97	0.64	0.12	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-B5	(b)	27-Feb-98	< 0.05	0.1	na
LF-B5	(b)	09-Apr-98	< 0.05	< 0.05	na
LF-B5	(b)	16-Jul-98	< 0.05	< 0.05	na
LF-B5	(b)	23-Oct-98	< 0.05	< 0.05	na
LF-B5	(b)	13-Jan-99	0.053	0.057	na
LF-B5	(b)	21-Apr-99	< 0.047	0.16	na
LF-B5	(b)	15-Jul-99	< 0.048	0.14 g	na
LF-B5	(b)	15-Oct-99	< 0.047	0.15 g	na
DUP	(b)	15-Oct-99	< 0.048	0.16 g	na
LF-B5	(b)	21-Jan-00	< 0.05	0.17 J,g	na
LF-B5	(b)	02-Feb-01	na	na	na
LF-B5	(b)	10-Jan-02	na	na	na
LF-B5	(b)	20-Jan-03	na	na	na
LF-B5	(b)	22-Jan-04	na	na	na
DUP	(b)	22-Jan-04	na	na	na
LF-B5	(b)	20-Jan-05	na	na	na
LF-B5	(b)	25-Jan-06	na	na	na
LF-B5	(b)	18-Apr-07	na	na	na
LF-B5	(b)	15-Apr-08	na	na	na
LF-B5	(b)	17-Apr-09	na	na	na
LF-B5	(b)	30-Apr-10	na	na	na
LF-B6		09-Apr-96	1	2.7	na
LF-B6		01-Aug-96	0.08	0.38	na
LF-B6		25-Nov-96	0.34	0.21	na
DUP		25-Nov-96	0.34	0.18	na
LF-B6		17-Mar-97	0.14	0.1	na
LF-B6		12-Jun-97	0.21	0.2	na
LF-B6		19-Aug-97	0.19	0.16	na
LF-B6		18-Dec-97	< 0.05	0.14	na
LF-B6		27-Feb-98	< 0.05	0.082	na
LF-B6		08-Apr-98	< 0.05	< 0.05	na
LF-B6		15-Jul-98	< 0.05	< 0.05	na
LF-B6		19-Oct-98	< 0.05	< 0.05	na
LF-B6		13-Jan-99	< 0.047	0.063	na
LF-B6		21-Apr-99	< 0.048	0.056	na
LF-B6		14-Jul-99	< 0.048	< 0.05	na
LF-B6		15-Oct-99	< 0.047	0.061 g	na
LF-B6		21-Jan-00	< 0.05	0.059 J,g	na
LF-B6		25-Jan-01	na	na	na
DUP		25-Jan-01	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
LF-B6		10-Apr-01	na	na	na
LF-B6		10-Jan-02	na	na	na
LF-B6		17-Jan-03	na	na	na
LF-B6		22-Jan-04	na	na	na
LF-B6		19-Jan-05	na	na	na
LF-B6		25-Jan-06	na	na	na
DUP		25-Jan-06	na	na	na
LF-B6		17-Apr-07	na	na	na
LF-B6		14-Apr-08	na	na	na
LF-B6		16-Apr-09	na	na	na
LF-B6		26-Apr-10	na	na	na
MD-1	(j)	05-May-03	na	na	na
MD-1	(j)	14-Oct-03	25	na	na
MD-1	(j)	20-Jan-04	24	na	na
MD-1	(j)	27-Apr-04	18	na	na
MD-1	(j)	22-Oct-04	19	na	na
MD-1	(j)	30-Sep-05	29	na	na
MD-1	(j)	15-Apr-06	3.1	na	na
MD-1	(j)	26-Oct-06	14	na	na
MD-1	(j)	12-Apr-07	4.4	na	na
MD-1	(j),(l)	12-Oct-07	8.6	na	na
MD-1	(j),(l)	22-Apr-08	8.3	na	na
MD-1	(j),(l)	22-Oct-08	5.4	na	na
MD-1	(j),(l)	24-Apr-09	5.9 Y	na	na
MD-1	(j),(l)	21-Oct-09	4.0Y	na	na
MD-1	(j),(l)	21-Oct-09	4.2 Y	na	na
MD-1	(j),(l)	29-Apr-10	5.4	na	na
MD-1	(j),(l)	27-Oct-10	3.1 Y	na	na
MD-1	(j)	14-Nov-11	1.3	na	na
MD-1	(j),(l)	17-Oct-12	1.9 Y	na	na
MD-1	(j)	08-Oct-13	1.8	na	na
MD-1	(j)	27-Oct-14	2.5	na	na
MD-2	(j)	05-May-03	3.4	na	na
MD-2	(j)	14-Oct-03	3.5	na	na
MD-2	(j)	20-Jan-04	3.2	na	na
MD-2	(j)	27-Apr-04	2.4	na	na
MD-2	(j)	22-Oct-04	2.8	na	na
MD-2	(j)	30-Sep-05	2.6	na	na
MD-2	(j)	15-Apr-06	2.3	na	na
MD-2	(j)	26-Oct-06	2.2	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
MD-2	(j)	12-Apr-07	2.0	na	na
MD-2	(j),(l)	12-Oct-07	2.1	na	na
MD-2	(j),(l)	22-Apr-08	2.0	na	na
MD-2	(j),(l)	22-Oct-08	2.5	na	na
MD-2	(j),(l)	24-Apr-09	2.0 Y	na	na
MD-2	(j),(l)	21-Oct-09	2.1 Y	na	na
MD-2	(j),(l)	21-Oct-09	2.1Y	na	na
MD-2	(j),(l)	29-Apr-10	2.9 Y	na	na
DUP	(j),(l)	29-Apr-10	2.4 Y	na	na
MD-2	(j),(l)	27-Oct-10	2.7 Y	na	na
MD-2	(j),(l)	14-Nov-11	1.3 Y	na	na
MD-2	(j),(l)	17-Oct-12	2.0 Y	na	na
MD-2	(j)	07-Oct-13	2.3 Y	na	na
DUP	(j)	08-Oct-13	2 Y	na	na
MD-2	(j)	27-Oct-14	2.7 Y	na	na
DUP	(j)	27-Oct-14	2.9 Y	na	na
MD-3	(j)	05-May-03	1.7	na	na
MD-3	(j)	14-Oct-03	2.0	na	na
MD-3	(j)	20-Jan-04	1.3	na	na
MD-3	(j)	27-Apr-04	1.1	na	na
MD-3	(j)	22-Oct-04	2.1	na	na
MD-3	(j)	30-Sep-05	0.800	na	na
MD-3	(j)	15-Apr-06	0.590	na	na
MD-3	(j)	26-Oct-06	0.760	na	na
MD-3	(j)	12-Apr-07	0.850	na	na
MD-3	(j),(l)	12-Oct-07	1.2	na	na
MD-3	(j),(l)	22-Apr-08	1.9	na	na
MD-3	(j),(l)	22-Oct-08	1.3	na	na
MD-3	(j),(l)	24-Apr-09	0.810 Y	na	na
MD-3	(j),(l)	21-Oct-09	0.79 Y	na	na
MD-3	(j),(l)	29-Apr-10	2.9Y	na	na
MD-3	(j),(l)	29-Apr-10	1.0 Y	na	na
MD-3	(j),(l)	27-Oct-10	1.2 Y	na	na
MD-3	(j),(l)	14-Nov-11	0.95 Y	na	na
MD-3	(j),(l)	17-Oct-12	1.7 Y	na	na
MD-3	(j)	07-Oct-13	1.1 Y	na	na
MD-3	(j)	07-Oct-13	1.6 Y	na	na
MD-3	(j)	27-Oct-14	1.6 Y	na	na
MD-4	(j)	05-May-03	na	na	na
MD-4	(j)	14-Oct-03	0.110	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
MD-4	(j)	20-Jan-04	0.150	na	na
MD-4	(j)	27-Apr-04	0.084	na	na
MD-4	(j)	22-Oct-04	0.130	na	na
MD-4	(j)	30-Sep-05	0.100	na	na
MD-4	(j)	15-Apr-06	0.093	na	na
MD-4	(j)	26-Oct-06	0.140	na	na
MD-4	(j)	12-Apr-07	0.067	na	na
MD-4	(j),(l)	12-Oct-07	0.052	na	na
MD-4	(j)	22-Apr-08	<0.050	na	na
MD-4	(j),(l)	22-Oct-08	0.098	na	na
MD-4	(j),(l)	24-Apr-09	0.110 Y	na	na
MD-4	(j),(l)	21-Oct-09	0.17 Y	na	na
MD-4	(j),(l)	29-Apr-10	0.16 Y	na	na
MD-4	(j),(l)	27-Oct-10	0.19 Y	na	na
DUP	(j),(l)	27-Oct-10	0.23 Y	na	na
MD-4	(j),(l)	14-Nov-11	0.12 Y	na	na
MD-4	(j),(l)	17-Oct-12	0.091 Y	na	na
MD-4	(j)	08-Oct-13	0.22 Y	na	na
MD-4	(j)	27-Oct-14	0.14 Y	na	na
MD-5	(k)	05-May-03	na	na	na
MD-5	(k)	13-Oct-03	na	na	na
MD-5	(k)	20-Jan-04	na	na	na
DUP	(k)	20-Jan-04	na	na	na
MD-5	(k)	21-Apr-04	na	na	na
MD-5	(k)	21-Oct-04	na	na	na
MD-5	(k)	29-Mar-05	na	na	na
MD-5	(k)	21-Sep-05	na	na	na
MD-5	(j)	30-Sep-05	0.140	na	na
MD-5	(k)	13-Apr-06	na	na	na
MD-5	(k)	26-Oct-06	na	na	na
MD-5	(k)	16-Apr-07	na	na	na
MD-5	(k)	11-Oct-07	na	na	na
MD-5	(k)	23-Apr-08	na	na	na
MD-5	(k)	23-Oct-08	na	na	na
DUP	(k)	23-Oct-08	na	na	na
MD-5	(k)	24-Apr-09	na	na	na
MD-5	(k)	21-Oct-09	na	na	na
MD-5	(k)	21-Oct-09	na	na	na
MD-5	(k)	29-Apr-10	na	na	na
MD-5	(k)	29-Apr-10	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
MD-5	(k)	27-Oct-10	na	na	na
MD-5	(k)	14-Nov-11	na	na	na
MD-5	(k)	17-Oct-12	na	na	na
MW-1		29-Mar-95	3.6	7.41	na
MW-1		08-Jun-95	2.6	2.1	na
MW-1		09-Jan-96	4	1.3	na
MW-1		17-Apr-96	1.1	1.7	na
MW-1		31-Jul-96	12	2.4	na
MW-1		19-Nov-96	1.5	0.85	na
MW-1		25-Mar-97	1.8	0.99	na
MW-1		10-Jun-97	1.3	0.94	na
MW-1		18-Aug-97	1.6	0.88	na
MW-1		19-Dec-97	1.2	1.1	na
MW-1		26-Feb-98	1.1	1.8	na
MW-1		08-Apr-98	< 0.5	< 0.05	na
DUP		08-Apr-98	< 0.5	< 0.05	na
MW-1		14-Jul-98	< 0.25	< 0.05	na
MW-1		21-Oct-98	< 0.25	< 0.05	na
MW-1		12-Jan-99	1.6	1.3	na
MW-1		20-Apr-99	1.3	1.5	na
MW-1		13-Jul-99	1.3 c	1	na
MW-1		11-Oct-99	0.92 c	1.2 d	na
MW-1		18-Jan-00	1.1 J	1.3 J,d	na
MW-1		24-Jan-01	na	na	na
MW-1		16-Jan-03	na	na	na
MW-1		26-Jan-06	na	na	na
MW-2		29-Mar-95	4.4	3	na
MW-2		08-Jun-95	3.8	1.3	na
MW-2		09-Jan-96	2.5	0.9	na
MW-2		17-Apr-96	4.6	0.62	na
MW-2		31-Jul-96	3.2	0.71	na
MW-2		19-Nov-96	3.2	0.37	na
MW-2		25-Mar-97	3.3	0.52	na
MW-2		10-Jun-97	1.5	0.5	na
MW-2		18-Aug-97	1.8	0.73	na
MW-2		19-Dec-97	1.5	0.4	na
MW-2		26-Feb-98	2.4	0.45	na
MW-2		08-Apr-98	< 0.5	< 0.05	na
MW-2		14-Jul-98	< 0.25 UJ3	< 0.05	na
MW-2		21-Oct-98	< 0.1	< 0.05	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
DUP		21-Oct-98	< 0.05	< 0.05	na
MW-2		12-Jan-99	1.1	0.33	na
MW-2		24-Jan-01	na	na	na
MW-2		08-Jan-02	na	na	na
MW-2		16-Jan-03	na	na	na
MW-2		20-Jan-04	na	na	na
MW-2		18-Jan-05	na	na	na
MW-2		25-Jan-06	na	na	na
MW-2		16-Apr-07	na	na	na
MW-2		17-Apr-08	na	na	na
MW-2		17-Apr-09	na	na	na
MW-2		29-Apr-10	na	na	na
MW-3		29-Mar-95	1.5	2	na
MW-3		08-Jun-95	0.55	0.43	na
MW-3		09-Jan-96	0.3	0.2	na
MW-3		17-Apr-96	0.18	0.16	na
MW-3		31-Jul-96	0.42	9.4	na
MW-3		19-Nov-96	0.46	0.47	na
MW-3		25-Mar-97	< 0.05	0.31	na
MW-3		10-Jun-97	< 0.05	0.07	na
MW-3		18-Aug-97	< 0.05	0.1	na
MW-3		19-Dec-97	0.06	0.07	na
MW-3		26-Feb-98	< 0.05	0.11	na
MW-3		07-Apr-98	< 0.05	< 0.05	na
MW-3		14-Jul-98	< 0.05	< 0.05	na
DUP		14-Jul-98	< 0.05	< 0.05	na
MW-3		20-Oct-98	< 0.05	< 0.05	na
MW-3		11-Jan-99	0.073	0.069	na
DUP		11-Jan-99	0.049	0.065	na
MW-3		19-Apr-99	0.091	0.1	na
MW-3		13-Jul-99	0.14 c	0.12	na
MW-3		11-Oct-99	0.047 i	< 0.05	na
MW-3		17-Jan-00	0.078 J	0.053	na
MW-3		28-Apr-00	na	na	na
MW-3		25-Jul-00	na	na	na
MW-3		10-Oct-00	na	na	na
MW-3		24-Jan-01	na	na	na
MW-3		09-Apr-01	na	na	na
MW-3		05-Jul-01	na	na	na
MW-3		15-Oct-01	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
MW-3		08-Jan-02	na	na	na
MW-3		08-Apr-02	na	na	na
MW-3		08-Jul-02	na	na	na
DUP		08-Jul-02	na	na	na
MW-3		09-Oct-02	na	na	na
MW-3		15-Jan-03	na	na	na
MW-3		16-Apr-03	na	na	na
MW-3		09-Jul-03	na	na	na
MW-3		28-Oct-03	na	na	na
MW-3		20-Jan-04	na	na	na
DUP		20-Jan-04	na	na	na
MW-3		04-May-04	na	na	na
MW-3		15-Jul-04	na	na	na
MW-3		13-Oct-04	na	na	na
MW-3		18-Jan-05	na	na	na
MW-3		19-Apr-05	na	na	na
MW-3		19-Jul-05	na	na	na
DUP		19-Jul-05	na	na	na
MW-3		27-Oct-05	na	na	na
MW-3		23-Jan-06	na	na	na
MW-3		17-Apr-06	na	na	na
MW-3		18-Apr-07	na	na	na
MW-3		15-Apr-08	na	na	na
MW-3		14-Apr-09	na	na	na
MW-3		28-Apr-10	na	na	na
MW-3		15-Apr-11	na	na	na
MW-3		21-Jul-11	na	na	na
MW-3		12-Oct-11	na	na	na
MW-3		23-Feb-12	na	na	na
DUP		23-Feb-12	na	na	na
MW-3		17-Apr-12	na	na	na
MW-4		29-Mar-95	2.5	1.9	na
MW-4		08-Jun-95	4.5	1.1	na
MW-4		10-Jan-96	6.3	0.7	na
MW-4		19-Nov-96	6.9	0.7	na
MW-4		18-Aug-97	9.9	1.1	na
MW-4		19-Dec-97	12	0.18	na
MW-4		02-Mar-98	3.7	0.22	na
MW-4		10-Apr-98	< 0.25	< 0.05	na
MW-4		17-Jul-98	< 0.25	< 0.05	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
MW-4		23-Oct-98	< 1	< 0.05	na
MW-4		15-Jan-99	6.6	0.27	na
MW-4		22-Apr-99	9.2	0.52	na
MW-4		16-Jul-99	9.1 c,e	0.25	na
MW-4		25-Oct-99	10 e	0.23 d,h	na
MW-4		25-Jan-00	4.2 J	0.22	na
MW-4		01-May-00	na	na	na
MW-4		25-Jul-00	na	na	na
MW-4		09-Oct-00	na	na	na
MW-4		16-Jan-01	na	na	na
MW-4		13-Apr-01	na	na	na
MW-4		06-Jul-01	na	na	na
MW-4		16-Oct-01	na	na	na
MW-4		09-Jan-02	na	na	na
MW-4		10-Apr-02	na	na	na
DUP		10-Apr-02	na	na	na
MW-4		09-Jul-02	na	na	na
MW-4		10-Oct-02	na	na	na
MW-4		15-Jan-03	na	na	na
MW-4		16-Apr-03	na	na	na
MW-4		10-Jul-03	na	na	na
MW-4		20-Jan-04	na	na	na
MW-4		06-May-04	na	na	na
MW-4		14-Jul-04	na	na	na
MW-4		13-Oct-04	na	na	na
MW-4		19-Jan-05	na	na	na
MW-4		18-Apr-05	na	na	na
MW-4		19-Jul-05	na	na	na
MW-4		27-Oct-05	na	na	na
MW-4		26-Jan-06	na	na	na
MW-4		17-Apr-06	na	na	na
MW-4		20-Apr-07	na	na	na
MW-4		18-Apr-08	na	na	na
MW-4		15-Apr-09	na	na	na
MW-4		28-Apr-10	na	na	na
MW-5		29-Mar-95	1.1	660	na
MW-5		08-Jun-95	13	38	na
MW-5		10-Jan-96	5.4	160	na
MW-5		19-Nov-96	3.7	180	na
MW-5		18-Aug-97	15	120	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
MW-5		19-Dec-97	6	160	na
MW-5		02-Mar-98	3.8	198	na
MW-5		10-Apr-98	< 0.5	250 J2	na
MW-5		17-Jul-98	< 0.5	< 10 UJ3	na
MW-5		19-Oct-98	< 5	130	na
MW-5		15-Jan-99	19	230	na
MW-5		22-Apr-99	20 cfi	190	na
MW-5		19-Jul-99	20 cfi	130 d	na
DUP		19-Jul-99	18 cfi	130 d	na
MW-5		25-Oct-99	22 i	190	na
MW-5		25-Jan-00	14 J	140 J,g	na
MW-5		01-May-00	na	na	na
MW-5		25-Jul-00	na	na	na
MW-5		09-Oct-00	na	na	na
MW-5		16-Jan-01	na	na	na
MW-5		13-Apr-01	na	na	na
DUP		13-Apr-01	na	na	na
MW-5		06-Jul-01	na	na	na
MW-5		16-Oct-01	na	na	na
DUP		16-Oct-01	na	na	na
MW-5		09-Jan-02	na	na	na
MW-5		10-Apr-02	na	na	na
MW-5		09-Jul-02	na	na	na
MW-5		10-Oct-02	na	na	na
MW-5		15-Jan-03	na	na	na
MW-5		15-Apr-03	na	na	na
MW-5		10-Jul-03	na	na	na
MW-5		28-Oct-03	na	na	na
MW-5		20-Jan-04	na	na	na
MW-5		04-May-04	na	na	na
MW-5		14-Jul-04	na	na	na
MW-5		13-Oct-04	na	na	na
MW-5		19-Jan-05	na	na	na
MW-5		18-Apr-05	na	na	na
MW-5		19-Jul-05	na	na	na
MW-5		27-Oct-05	na	na	na
MW-5		17-Apr-06	na	na	na
MW-5		17-Apr-07	na	na	na
MW-5		17-Apr-08	na	na	na
MW-5		15-Apr-09	na	na	na
DUP		15-Apr-09	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
MW-5		28-Apr-10	na	na	na
RP-1		08-Sep-94	4.4	1.9	na
RP-1		28-Feb-95	1.8	0.3	na
RP-1		29-Mar-95	0.78	< 0.05	na
RP-1		10-May-95	1.4	2.6	na
RP-1		09-Aug-95	1.4	1.4	na
RP-1		17-Nov-95	0.96	1.2	na
RP-1		10-Jan-96	0.55	0.8	na
RP-1		17-Apr-96	0.59	0.12	na
DUP		17-Apr-96	0.72	0.15	na
RP-1		31-Jul-96	1.1	1.4	na
RP-1		19-Nov-96	2.3	0.6	na
RP-1		25-Mar-97	1.2	0.68	na
RP-1		10-Jun-97	0.9	0.55	na
RP-1		18-Aug-97	1.4	1.2	na
RP-1		19-Dec-97	0.86	0.7	na
DUP		19-Dec-97	0.79	0.46	na
RP-1		26-Feb-98	0.42	< 0.05	na
DUP		26-Feb-98	0.5	< 0.05	na
RP-1		07-Apr-98	< 0.05	< 0.05	na
RP-1		14-Jul-98	< 0.05	< 0.05	na
RP-1		20-Oct-98	< 0.1	< 0.05	na
RP-1		12-Jan-99	1.1	0.063	na
RP-1		19-Apr-99	2.4	< 0.05	na
RP-1		16-Jul-99	1.2 c,e	0.14 d,h	na
RP-1		25-Oct-99	2 e	< 0.05	na
RP-1		18-Jan-00	1.5 J	< 0.05	na
RP-1		27-Apr-00	na	na	na
RP-1		25-Jul-00	na	na	na
RP-1		10-Oct-00	na	na	na
RP-1		25-Jan-01	na	na	na
RP-1		09-Apr-01	na	na	na
RP-1		05-Jul-01	na	na	na
DUP		05-Jul-01	na	na	na
RP-1		12-Oct-01	na	na	na
RP-1		08-Jan-02	na	na	na
RP-1		08-Apr-02	na	na	na
RP-1		08-Jul-02	na	na	na
RP-1		09-Oct-02	na	na	na
RP-1		15-Jan-03	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
RP-1		15-Apr-03	na	na	na
RP-1		09-Jul-03	na	na	na
RP-1		28-Oct-03	na	na	na
RP-1		19-Jan-04	na	na	na
RP-1		03-May-04	na	na	na
RP-1		15-Jul-04	na	na	na
RP-1		13-Oct-04	na	na	na
RP-1		19-Jan-05	na	na	na
RP-1		19-Apr-05	na	na	na
RP-1		19-Jul-05	na	na	na
RP-1		24-Oct-05	na	na	na
RP-1		23-Jan-06	na	na	na
RP-1		17-Apr-06	na	na	na
RP-1		18-Apr-07	na	na	na
RP-1		15-Apr-08	na	na	na
RP-1		14-Apr-09	na	na	na
RP-1		28-Apr-10	na	na	na
RP-1		15-Apr-11	na	na	na
RP-1		21-Jul-11	na	na	na
RP-1		23-Feb-12	na	na	na
RP-1		17-Apr-12	na	na	na
RP-2		08-Sep-94	0.4	0.09	na
DUP		08-Sep-94	0.3	0.09	na
RP-2		28-Feb-95	< 0.05	0.09	na
RP-2		29-Mar-95	0.4	0.07	na
RP-2		10-May-95	0.3	< 0.05	na
RP-2		09-Aug-95	0.2	< 0.05	na
RP-2		17-Nov-95	0.2	0.1	na
RP-2		10-Jan-96	0.1	0.05	na
RP-2		17-Apr-96	0.17	< 0.05	na
RP-2		31-Jul-96	< 0.05	< 0.05	na
RP-2		19-Nov-96	0.18	< 0.05	na
RP-2		25-Mar-97	0.2	< 0.05	na
RP-2		10-Jun-97	0.13	< 0.05	na
RP-2		18-Aug-97	0.17	< 0.05	na
DUP		18-Aug-97	0.16	< 0.05	na
RP-2		19-Dec-97	0.16	< 0.05	na
RP-2		26-Feb-98	0.14	< 0.05	na
RP-2		07-Apr-98	< 0.05	< 0.05	na
RP-2		13-Jul-98	< 0.05	< 0.05	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
RP-2		20-Oct-98	< 0.05	< 0.05	na
RP-2		11-Jan-99	0.22	0.053	na
RP-2		19-Apr-99	0.3	< 0.05	na
RP-2		13-Jul-99	0.21 c	< 0.05	na
RP-2		25-Oct-99	0.15 e	< 0.05	na
RP-2		18-Jan-00	0.15 J	< 0.05	na
DUP		18-Jan-00	0.13 J	< 0.05	na
RP-2		27-Apr-00	na	na	na
RP-2		25-Jul-00	na	na	na
RP-2		10-Oct-00	na	na	na
RP-2		17-Jan-01	na	na	na
RP-2		09-Apr-01	na	na	na
RP-2		05-Jul-01	na	na	na
RP-2		12-Oct-01	na	na	na
RP-2		09-Jan-02	na	na	na
RP-2		08-Apr-02	na	na	na
RP-2		08-Jul-02	na	na	na
RP-2		09-Oct-02	na	na	na
DUP		09-Oct-02	na	na	na
RP-2		14-Jan-03	na	na	na
RP-2		15-Apr-03	na	na	na
RP-2		09-Jul-03	na	na	na
DUP		09-Jul-03	na	na	na
RP-2		27-Oct-03	na	na	na
RP-2		19-Jan-04	na	na	na
RP-2		03-May-04	na	na	na
RP-2		12-Jul-04	na	na	na
RP-2		13-Oct-04	na	na	na
RP-2		17-Jan-05	na	na	na
RP-2		19-Apr-05	na	na	na
RP-2		19-Jul-05	na	na	na
RP-2		24-Oct-05	na	na	na
RP-2		23-Jan-06	na	na	na
RP-2		17-Apr-06	na	na	na
RP-2		20-Apr-07	na	na	na
DUP		20-Apr-07	na	na	na
RP-2		17-Apr-08	na	na	na
RP-2		14-Apr-09	na	na	na
RP-2		28-Apr-10	na	na	na
RP-2		15-Apr-11	na	na	na
RP-2		21-Jul-11	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
DUP		21-Jul-11	na	na	na
RP-2		12-Oct-11	na	na	na
RP-2		23-Feb-12	na	na	na
RP-2		17-Apr-12	na	na	na
RP-3		08-Sep-94	0.7	0.1	na
RP-3		28-Feb-95	1.2	0.2	na
RP-3		29-Mar-95	1.9	0.3	na
RP-3		10-May-95	1.7	0.1	na
RP-3		09-Aug-95	1.2	0.2	na
RP-3		17-Nov-95	1.1	0.1	na
RP-3		10-Jan-96	0.56	0.1	na
RP-3		17-Apr-96	0.42	0.13	na
RP-3		31-Jul-96	0.39	0.1	na
RP-3		19-Nov-96	1.2	0.07	na
RP-3		25-Mar-97	0.47	0.09	na
RP-3		10-Jun-97	0.53	0.1	na
RP-3		18-Aug-97	0.5	0.09	na
RP-3		19-Dec-97	0.48	0.08	na
RP-3		25-Feb-98	0.49	0.15	na
RP-3		07-Apr-98	< 0.05	< 0.05	na
RP-3		13-Jul-98	< 0.05	< 0.05	na
RP-3		20-Oct-98	< 0.05	< 0.05	na
DUP		20-Oct-98	< 0.05	< 0.05	na
RP-3		11-Jan-99	0.75	0.13	na
RP-3		19-Apr-99	2.5	0.32	na
RP-3		16-Jul-99	1.5 cei	0.22	na
RP-3		25-Oct-99	1.8 i	0.29 d	na
RP-3		14-Jan-00	0.33	0.18 J,d	na
RP-3		27-Apr-00	na	na	na
RP-3		25-Jul-00	na	na	na
RP-3		10-Oct-00	na	na	na
RP-3		17-Jan-01	na	na	na
RP-3		10-Apr-01	na	na	na
RP-3		03-Jul-01	na	na	na
RP-3		15-Oct-01	na	na	na
RP-3		08-Jan-02	na	na	na
RP-3		08-Apr-02	na	na	na
RP-3		08-Jul-02	na	na	na
RP-3		07-Oct-02	na	na	na
RP-3		15-Jan-03	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
RP-3		15-Apr-03	na	na	na
RP-3		09-Jul-03	na	na	na
RP-3		27-Oct-03	na	na	na
RP-3		19-Jan-04	na	na	na
DUP		19-Jan-04	na	na	na
RP-3		03-May-04	na	na	na
RP-3		14-Jul-04	na	na	na
RP-3		13-Oct-04	na	na	na
RP-3		17-Jan-05	na	na	na
RP-3		18-Apr-05	na	na	na
RP-3		18-Jul-05	na	na	na
RP-3		24-Oct-05	na	na	na
RP-3		23-Jan-06	na	na	na
RP-3		17-Apr-06	na	na	na
RP-3		18-Apr-07	na	na	na
RP-3		16-Apr-08	na	na	na
DUP		16-Apr-08	na	na	na
RP-3		14-Apr-09	na	na	na
RP-3		28-Apr-10	na	na	na
DUP		28-Apr-10	na	na	na
RP-3		17-Apr-12	na	na	na
RP-4		08-Sep-94	0.2	0.1	na
RP-4		28-Feb-95	0.07	0.08	na
DUP		28-Feb-95	0.07	0.07	na
RP-4		29-Mar-95	0.3	0.07	na
RP-4		10-May-95	0.2	<0.05	na
DUP		10-May-95	0.2	<0.05	na
RP-4		09-Aug-95	0.2	<0.05	na
DUP		09-Aug-95	0.2	<0.05	na
RP-4		17-Nov-95	0.1	<0.05	na
DUP		17-Nov-95	0.3	<0.05	na
RP-4		09-Jan-96	0.1	0.05	na
RP-4		17-Apr-96	0.14	<0.05	na
RP-4		31-Jul-96	0.24	<0.05	na
DUP		31-Jul-96	0.21	<0.05	na
RP-4		19-Nov-96	0.12	<0.05	na
RP-4		25-Mar-97	0.19	<0.05	na
RP-4		10-Jun-97	0.19	<0.05	na
DUP		10-Jun-97	0.12	<0.05	na
RP-4		18-Aug-97	0.07	<0.05	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
RP-4		19-Dec-97	0.07	< 0.05	na
RP-4		25-Feb-98	0.07	0.062	na
RP-4		07-Apr-98	< 0.05	< 0.05	na
RP-4		13-Jul-98	< 0.05	< 0.05	na
RP-4		20-Oct-98	< 0.05	< 0.05	na
RP-4		11-Jan-99	0.077	0.075	na
RP-4		19-Apr-99	0.11	0.068	na
RP-4		13-Jul-99	0.062 c	0.077	na
DUP		13-Jul-99	0.073 c	0.061	na
RP-4		25-Oct-99	0.099 e	< 0.05	na
RP-4		18-Jan-00	0.093 J	< 0.05	na
RP-4		27-Apr-00	na	na	na
RP-4		25-Jul-00	na	na	na
RP-4		10-Oct-00	na	na	na
RP-4		17-Jan-01	na	na	na
RP-4		09-Apr-01	na	na	na
RP-4		02-Jul-01	na	na	na
RP-4		12-Oct-01	na	na	na
RP-4		08-Jan-02	na	na	na
RP-4		08-Apr-02	na	na	na
RP-4		08-Jul-02	na	na	na
RP-4		07-Oct-02	na	na	na
RP-4		14-Jan-03	na	na	na
RP-4		15-Apr-03	na	na	na
RP-4		08-Jul-03	na	na	na
RP-4		27-Oct-03	na	na	na
RP-4		19-Jan-04	na	na	na
RP-4		03-May-04	na	na	na
RP-4		12-Jul-04	na	na	na
RP-4		13-Oct-04	na	na	na
RP-4		19-Jan-05	na	na	na
RP-4		19-Apr-05	na	na	na
RP-4		18-Jul-05	na	na	na
RP-4		24-Oct-05	na	na	na
DUP		24-Oct-05	na	na	na
RP-4		23-Jan-06	na	na	na
RP-4		18-Apr-06	na	na	na
DUP		18-Apr-06	na	na	na
RP-4		19-Apr-07	na	na	na
RP-4		16-Apr-08	na	na	na
RP-4		14-Apr-09	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
DUP		14-Apr-09	na	na	na
RP-4		28-Apr-10	na	na	na
RP-4		15-Apr-11	na	na	na
DUP		15-Apr-11	na	na	na
RP-4		21-Jul-11	na	na	na
RP-4		12-Oct-11	na	na	na
RP-4		23-Feb-12	na	na	na
RP-4		17-Apr-12	na	na	na
RP-5		08-Sep-94	0.6	0.09	na
RP-5		28-Feb-95	0.2	0.06	na
RP-5		29-Mar-95	0.8	< 0.05	na
RP-5		10-May-95	1.1	< 0.05	na
RP-5		09-Aug-95	0.69	< 0.05	na
RP-5		17-Nov-95	0.5	< 0.05	na
RP-5		09-Jan-96	0.2	< 0.05	na
DUP		09-Jan-96	0.2	< 0.05	na
RP-5		17-Apr-96	0.64	< 0.05	na
RP-5		31-Jul-96	0.79	< 0.05	na
RP-5		19-Nov-96	0.41	< 0.05	na
DUP		19-Nov-96	0.53	< 0.05	na
RP-5		25-Mar-97	0.54	< 0.05	na
DUP		25-Mar-97	0.59	< 0.05	na
RP-5		10-Jun-97	0.59	< 0.05	na
RP-5		18-Aug-97	0.67	< 0.05	na
RP-5		19-Dec-97	0.65	< 0.05	na
RP-5		26-Feb-98	0.34	0.055	na
RP-5		07-Apr-98	< 0.05	< 0.05	na
RP-5		13-Jul-98	< 0.05	< 0.05	na
RP-5		20-Oct-98	< 0.05	< 0.05	na
RP-5		12-Jan-99	0.43	0.07	na
RP-5		20-Apr-99	1	0.061	na
RP-5		13-Jul-99	0.48 c,e	0.07	na
RP-5		11-Oct-99	0.69 c,e	0.084 d	na
RP-5		18-Jan-00	0.44 J	0.087 J,d	na
RP-5		27-Apr-00	na	na	na
RP-5		25-Jul-00	na	na	na
RP-5		10-Oct-00	na	na	na
RP-5		17-Jan-01	na	na	na
RP-5		09-Apr-01	na	na	na
RP-5		02-Jul-01	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
RP-5		12-Oct-01	na	na	na
DUP		12-Oct-01	na	na	na
RP-5		09-Jan-02	na	na	na
DUP		09-Jan-02	na	na	na
RP-5		08-Apr-02	na	na	na
RP-5		08-Jul-02	na	na	na
RP-5		07-Oct-02	na	na	na
RP-5		14-Jan-03	na	na	na
RP-5		15-Apr-03	na	na	na
RP-5		08-Jul-03	na	na	na
RP-5		27-Oct-03	na	na	na
RP-5		19-Jan-04	na	na	na
RP-5		03-May-04	na	na	na
RP-5		12-Jul-04	na	na	na
RP-5		13-Oct-04	na	na	na
DUP		13-Oct-04	na	na	na
RP-5		19-Jan-05	na	na	na
RP-5		19-Apr-05	na	na	na
RP-5		18-Jul-05	na	na	na
RP-5		24-Oct-05	na	na	na
RP-5		23-Jan-06	na	na	na
RP-5		18-Apr-06	na	na	na
RP-5		20-Apr-07	na	na	na
RP-5		16-Apr-08	na	na	na
RP-5		14-Apr-09	na	na	na
RP-5		28-Apr-10	na	na	na
RP-5		15-Apr-11	na	na	na
RP-5		21-Jul-11	na	na	na
RP-5		12-Oct-11	na	na	na
RP-5		23-Feb-12	na	na	na
RP-5		17-Apr-12	na	na	na
RP-BW-02		11-Oct-99	< 0.048	0.11 g	na
RP-BW-02		20-Jan-00	< 0.05	0.1 Jg	na
RP-BW-02		28-Apr-00	na	na	na
RP-BW-02		25-Jul-00	na	na	na
RP-BW-02		10-Oct-00	na	na	na
RP-BW-02		18-Jan-01	na	na	na
DUP		18-Jan-01	na	na	na
RP-BW-02		10-Jan-02	na	na	na
DUP		10-Jan-02	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
RP-BW-02		15-Jan-03	na	na	na
RP-BW-02		20-Jan-04	na	na	na
RP-BW-02		15-Jul-04	na	na	na
RP-BW-02		19-Jan-05	na	na	na
RP-BW-02		25-Jan-06	na	na	na
RP-BW-02		17-Apr-07	na	na	na
RP-BW-02		17-Apr-08	na	na	na
RP-BW-02		15-Apr-09	na	na	na
RP-BW-02		30-Apr-10	na	na	na
SA-AW-01		14-Oct-99	0.098 c,e	< 0.05	na
SA-AW-01		13-Jan-00	0.15 J	< 0.05	na
SA-AW-01		27-Apr-00	na	na	na
SA-AW-01		24-Jul-00	na	na	na
SA-AW-01		11-Oct-00	na	na	na
SA-AW-01		25-Jan-01	na	na	na
SA-AW-01		09-Jan-02	na	na	na
SA-AW-01		17-Jan-03	na	na	na
SA-AW-01		21-Jan-04	na	na	na
SA-AW-01		20-Jan-05	na	na	na
SA-AW-01		24-Jan-06	na	na	na
SA-AW-01		19-Apr-07	na	na	na
SA-AW-01		16-Apr-08	na	na	na
DUP		16-Apr-08	na	na	na
SA-AW-01		15-Apr-09	na	na	na
SA-AW-01		27-Apr-10	na	na	na
SA-AW-02		25-Jan-01	na	na	na
SA-AW-02		10-Apr-01	na	na	na
SA-AW-02		06-Jul-01	na	na	na
SA-AW-02		15-Oct-01	na	na	na
SA-AW-02		09-Jan-02	na	na	na
SA-AW-02		17-Jan-03	na	na	na
SA-AW-02		22-Jan-04	na	na	na
SA-AW-02		20-Jan-05	na	na	na
SA-AW-02		25-Jan-06	na	na	na
SA-AW-03		12-Oct-99	< 0.05	< 0.05	na
SA-AW-03		19-Jan-00	< 0.05	< 0.05	na
SA-AW-03		27-Apr-00	na	na	na
SA-AW-03		24-Jul-00	na	na	na
SA-AW-03		11-Oct-00	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
SA-AW-03		18-Jan-01	na	na	na
SA-AW-03		09-Jan-02	na	na	na
SA-AW-03		17-Jan-03	na	na	na
SA-AW-03		21-Jan-04	na	na	na
SA-AW-03		21-Jan-05	na	na	na
SA-AW-03		25-Jan-06	na	na	na
SA-AW-04		14-Oct-99	< 0.051	< 0.05	na
SA-AW-04		19-Jan-00	< 0.05	< 0.05	na
DUP		19-Jan-00	< 0.05	< 0.05	na
SA-AW-04		27-Apr-00	na	na	na
DUP		27-Apr-00	na	na	na
SA-AW-04		24-Jul-00	na	na	na
DUP		24-Jul-00	na	na	na
SA-AW-04		11-Oct-00	na	na	na
SA-AW-04		25-Jan-01	na	na	na
SA-AW-04		09-Jan-02	na	na	na
SA-AW-04		17-Jan-03	na	na	na
SA-AW-04		21-Jan-04	na	na	na
SA-AW-04		18-Jan-05	na	na	na
DUP		18-Jan-05	na	na	na
SA-AW-04		25-Jan-06	na	na	na
SA-AW-05		14-Oct-99	< 0.051	< 0.05	na
DUP		14-Oct-99	< 0.051	< 0.05	na
SA-AW-05		19-Jan-00	< 0.05	< 0.05	na
SA-AW-05		27-Apr-00	na	na	na
SA-AW-05		24-Jul-00	na	na	na
SA-AW-05		11-Oct-00	na	na	na
DUP		11-Oct-00	na	na	na
SA-AW-05		18-Jan-01	na	na	na
SA-AW-05		09-Jan-02	na	na	na
SA-AW-05		17-Jan-03	na	na	na
DUP		17-Jan-03	na	na	na
SA-AW-05		21-Jan-04	na	na	na
SA-AW-05		18-Jan-05	na	na	na
SA-AW-05		25-Jan-06	na	na	na
SA-AW-05		20-Apr-07	na	na	na
SA-AW-05		17-Apr-09	na	na	na
SA-BW-01		14-Oct-99	1.4 i	< 0.05	na
SA-BW-01		13-Jan-00	< 0.05	< 0.05	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil
SA-BW-01		27-Apr-00	na	na	na
SA-BW-01		24-Jul-00	na	na	na
SA-BW-01		11-Oct-00	na	na	na
DUP		11-Oct-00	na	na	na
SA-BW-01		22-Jan-01	na	na	na
SA-BW-01		10-Jan-02	na	na	na
SA-BW-01		17-Jan-03	na	na	na
SA-BW-01		21-Jan-04	na	na	na
SA-BW-01		20-Jan-05	na	na	na
SA-BW-01		24-Jan-06	na	na	na
SA-BW-01		19-Apr-07	na	na	na
SA-BW-01		16-Apr-08	na	na	na
SA-BW-01		15-Apr-09	na	na	na
SA-BW-01		26-Apr-10	na	na	na
SP-AW-06		18-Jan-01	na	na	na
SP-AW-06		09-Apr-01	na	na	na
SP-AW-06		06-Jul-01	na	na	na
SP-AW-06		15-Oct-01	na	na	na
SP-AW-06		08-Jan-02	na	na	na
DUP		08-Jan-02	na	na	na
SP-AW-06		17-Jan-03	na	na	na
SP-AW-06		20-Jan-04	na	na	na
SP-AW-06		04-May-04	na	na	na
DUP		04-May-04	na	na	na
SP-AW-06		15-Jul-04	na	na	na
SP-AW-06		14-Oct-04	na	na	na
SP-AW-06		18-Jan-05	na	na	na
SP-AW-06		19-Apr-05	na	na	na
SP-AW-06		21-Jul-05	na	na	na
SP-AW-06		25-Jan-06	na	na	na
SP-AW-06		20-Apr-07	na	na	na
SP-AW-06		18-Apr-08	na	na	na
DUP		18-Apr-08	na	na	na
SP-AW-06		14-Apr-09	na	na	na
SP-AW-06		29-Apr-10	na	na	na
DUP		29-Apr-10	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-3
Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline and Motor Oil in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California

Concentrations reported in milligrams per liter (mglL)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons as Diesel	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Motor Oil

Data QA/QC performed by EW.

Notes:

< = Analyte was not detected at or greater than the detection limit reported.

DUP = Duplicate sample (field duplicate).
Y = Sample exhibits chromatographic pattern that does not resemble standard.
na/ND = Data from table provided by EKI and/or SES consultants. Volatile Organic Compounds (VOCs) were not detected above reporting limits; however, individual analyte reporting limits were not provided.

a = Concentrations for LF-B1 may not represent B-zone water quality because LF-B1 is screened in the aquitard between the A- and B-zones.

b = Concentrations for LF-B5 may not represent B-zone water quality because LF-B5 is screened in the aquitard between the A- and B-zones.

c = Unknown hydrocarbon mixture with peak patterns atypical of diesel is quantified as diesel for a range of n-C10 to n-C24.

d = Unknown hydrocarbon mixture with peak patterns atypical of gasoline is quantified as gasoline for a range of n-C07 to n-C12.
e = The concentration reported for diesel is due primarily to the presence of a heavier petroleum product, possibly motor oil.
f = The concentration reported for diesel is due primarily to the presence of a lighter petroleum product (range C06-C12), possibly gasoline.
g = The concentration reported for gasoline is due to the presence of a discrete hydrocarbon peak not indicative of gasoline.
h = The concentration reported for gasoline is due primarily to the presence of a heavier hydrocarbon peak not indicative of gasoline.
i = The concentration reported for diesel is due to the presence of a discrete hydrocarbon peak not indicative of diesel.

j = SBPA well monitored by SLR consulting.

k = SBPA well monitored by EKI personnel.

l = Sample exhibits chromatographic pattern that does not resemble standard for diesel.

Data qualifiers and notes for Total Petroleum Hydrocarbon data:

J= Concentration is estimated.
J1= Concentration is estimated because the concentration exceeded the calibration range of the analytical instrument.
J2 = Concentration is estimated because the sample was analyzed outside of holding time.
J3 = Concentration is estimated because surrogate recoveries were outside of control limits.
U = Quantified as nondetect.

J11 = Concentration is estimated because it was reported at a concentration less than the detection limit.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
CDM-1		14-Feb-07	2.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Feb-07	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-1		20-Apr-07	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-1		19-Jul-07	8.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Jul-07	8.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-1		15-Oct-07	5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-1		16-Apr-08	9.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-1		08-Oct-08	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-1		17-Apr-09	9.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Apr-09	8.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-1		27-Oct-09	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-1		26-Apr-10	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-1		19-Oct-10	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-1		18-Apr-11	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-101		17-Apr-12	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-101		19-Oct-12	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-101		22-Apr-13	0.043	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-101		07-Oct-13	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-101		28-Apr-14	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		28-Apr-14	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-101		29-Oct-14	0.049	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		29-Oct-14	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-102		17-Apr-12	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-102		19-Oct-12	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-102		22-Apr-13	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-102		07-Oct-13	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-102		28-Apr-14	0.0064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-102		29-Oct-14	0.0076	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-103		18-Apr-12	0.0053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-103		22-Oct-12	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
CDM-103		24-Apr-13	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-103		09-Oct-13	0.0053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-103		29-Apr-14	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-103		27-Oct-14	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Oct-14	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-104		18-Apr-12	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-104		22-Oct-12	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-104		24-Apr-13	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-104		09-Oct-13	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-104		25-Apr-14	< 0.005 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-104		13-May-14	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-104		30-Oct-14	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-105		18-Apr-12	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-105		22-Oct-12	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-105		24-Apr-13	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-105		07-Oct-13	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-105		25-Apr-14	0.076 F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-105		25-Apr-14	0.0053 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-105		13-May-14	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-105		13-May-14	0.059 F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-105		28-Oct-14	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-106		18-Apr-12	0.85	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-106		22-Oct-12	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-106		24-Apr-13	0.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-106		09-Oct-13	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Oct-13	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-106		25-Apr-14	1.3 F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-106		25-Apr-14	0.11 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-106		13-May-14	1.4 F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-106		13-May-14	0.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
CDM-106		28-Oct-14	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-107		18-Apr-12	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-107		19-Oct-12	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-107		23-Apr-13	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-107		07-Oct-13	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-107		25-Apr-14	0.029 F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-107		25-Apr-14	0.0084 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-107		13-May-14	0.0061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-107		13-May-14	0.022 F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-107		29-Oct-14	0.0098	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		18-Apr-12	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		19-Oct-12	0.053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		24-Apr-13	0.062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		07-Oct-13	0.069	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		07-Oct-13	0.071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		02-Dec-13	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		02-Dec-13	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		03-Jan-14	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		12-Feb-14	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		12-Feb-14	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		12-Feb-14	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		25-Apr-14	0.25 F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		25-Apr-14	0.11 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		25-Apr-14	0.24 F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		25-Apr-14	0.092 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		13-May-14	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		13-May-14	0.24 F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		08-Jul-14	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Jul-14	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-108		29-Oct-14	0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
CDM-109		19-Apr-12	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-109		22-Oct-12	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-109		24-Apr-13	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		24-Apr-13	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-109		09-Oct-13	0.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-109		25-Apr-14	0.24 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-109		25-Apr-14	0.26 F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-109		13-May-14	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-109		13-May-14	0.24 F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-109		30-Oct-14	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-110		18-Apr-12	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		18-Apr-12	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-110		22-Oct-12	0.044	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-110		23-Apr-13	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-110		08-Oct-13	0.061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-110		24-Apr-14	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-111		18-Apr-12	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-111		22-Oct-12	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-111		23-Apr-13	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-111		08-Oct-13	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-111		24-Apr-14	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-112		19-Apr-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Apr-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-112		24-Apr-13	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-112		29-Apr-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-113		19-Apr-12	5.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-113		24-Apr-13	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-113		24-Apr-14	3.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-114		18-Apr-12	0.097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-114		19-Oct-12	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
DUP		19-Oct-12	0.087	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-114		23-Apr-13	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		23-Apr-13	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CDM-114		24-Apr-14	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		24-Apr-14	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		15-Sep-95	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		18-Oct-95	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		18-Apr-96	0.002	NA	NA	NA	< 0.002	NA	NA	NA	NA	NA	NA
EX-1		01-Aug-96	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		18-Dec-96	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		15-Apr-97	0.072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		01-Jul-97	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		22-Sep-97	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		02-Dec-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04
EX-1		18-Dec-97	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		27-Feb-98	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		09-Apr-98	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		17-Jul-98	< 0.01 U5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		23-Oct-98	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		14-Jan-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		23-Apr-99	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		16-Jul-99	0.045	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		13-Oct-99	0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.091
EX-1		25-Jan-00	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		26-Apr-00	0.46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		26-Jul-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		09-Oct-00	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		16-Jan-01	0.0086	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		23-Jan-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1
EX-1		16-Apr-01	0.1 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-1		03-Jul-01	0.03 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		16-Oct-01	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		21-Jan-02	0.055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		21-Jan-02	0.052	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		09-Apr-02	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		09-Jul-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Jul-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		12-Dec-02	260	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		13-Jan-03	35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		16-Apr-03	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		07-Jul-03	0.77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		29-Oct-03	0.86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		23-Jan-04	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		05-May-04	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		05-May-04	0.92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		05-May-04	1.488	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		14-Jul-04	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		11-Oct-04	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		21-Jan-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		20-Apr-05	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		22-Jul-05	0.0094	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		26-Oct-05	0.17 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		27-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-1		20-Apr-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		11-Sep-98	0.70	<0.20	<0.0050	<0.0050	<0.0050	<0.010	<0.00020	<0.0050	<0.010	<0.050	<0.020
EX-10		22-Oct-98	0.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		14-Jan-99	0.88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		23-Apr-99	2.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		15-Jul-99	2.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-10		15-Oct-99	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		12-Jan-00	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		26-Apr-00	7.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		26-Jul-00	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		09-Oct-00	0.78	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		16-Jan-01	2.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		16-Apr-01	5.1 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		03-Jul-01	9.7 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		16-Oct-01	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		16-Jan-02	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Jan-02	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		09-Apr-02	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		09-Jul-02	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		07-Nov-02	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		13-Jan-03	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		14-Apr-03	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		07-Jul-03	4.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		07-Jul-03	7.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		29-Oct-03	6.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		23-Jan-04	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		06-May-04	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		14-Jul-04	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Jul-04	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		21-Jan-05	5.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		20-Apr-05	7.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		22-Jul-05	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		22-Jul-05	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		26-Oct-05	3.3 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		27-Jan-06	7.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Jan-06	7.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-10		20-Apr-06	6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		17-Apr-07	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		18-Apr-08	9.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		17-Apr-09	4.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-10		30-Apr-10	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-11		16-Jul-99	0.056	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-12		02-Jun-99	0.0085	0.028	<0.002	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.005	<0.01	13
DUP		02-Jun-99	<0.005	0.026	<0.002	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.005	<0.01	13
EX-12		13-Jul-99	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-12		25-Oct-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-13		02-Jun-99	0.077	0.073	<0.002	<0.005	<0.003	<0.01	<0.0002	0.0085	<0.005	<0.01	0.03
EX-13		16-Jul-99	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		08-Oct-99	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Oct-99	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		25-Jan-00	0.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		26-Apr-00	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		26-Jul-00	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		09-Oct-00	0.093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		16-Jan-01	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Jan-01	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		13-Apr-01	<0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		03-Jul-01	0.077 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		12-Oct-01	0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		17-Jan-02	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		09-Apr-02	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		10-Jul-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		18-Dec-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		14-Jan-03	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		14-Apr-03	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		07-Jul-03	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-14		29-Oct-03	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		23-Jan-04	0.046	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		06-May-04	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		14-Jul-04	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		14-Oct-04	0.0065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		21-Jan-05	0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		20-Apr-05	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		22-Jul-05	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		26-Oct-05	0.076 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		26-Oct-05	0.087 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		27-Jan-06	0.067	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-14		20-Apr-06	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		25-Jan-00	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		26-Apr-00	0.0071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		26-Apr-00	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		26-Jul-00	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		09-Oct-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		16-Jan-01	0.0083	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		13-Apr-01	0.0073	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		03-Jul-01	0.0083 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		12-Oct-01	0.078	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		17-Jan-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		09-Apr-02	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		09-Jul-02	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		18-Dec-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		13-Jan-03	0.0089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		14-Apr-03	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		07-Jul-03	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		29-Oct-03	0.052	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		23-Jan-04	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-15		06-May-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		14-Jul-04	0.0097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		14-Oct-04	0.0088	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		21-Jan-05	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		20-Apr-05	0.0098	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		22-Jul-05	0.0065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		26-Oct-05	0.038 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		27-Jan-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-15		20-Apr-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		25-Jan-00	5.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		26-Apr-00	0.043	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		26-Jul-00	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		09-Oct-00	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		16-Jan-01	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		13-Apr-01	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		03-Jul-01	1.7 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		12-Oct-01	3.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		16-Jan-02	0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		12-Apr-02	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		12-Apr-02	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		09-Jul-02	3.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		07-Nov-02	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		07-Nov-02	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		14-Jan-03	3.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		14-Apr-03	2.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		07-Jul-03	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		29-Oct-03	0.0083	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		23-Jan-04	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		06-May-04	5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		14-Jul-04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-16		14-Oct-04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		21-Jan-05	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		20-Apr-05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		22-Jul-05	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		26-Oct-05	2.5 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		27-Jan-06	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Jan-06	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-16		20-Apr-06	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		15-Sep-95	8.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		18-Oct-95	< 0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		18-Apr-96	9.3	NA	NA	NA	< 0.002	NA	NA	NA	NA	NA	NA
EX-2		01-Aug-96	57	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		18-Dec-96	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		04-Feb-97	38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		15-Apr-97	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		01-Jul-97	49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		22-Sep-97	42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		02-Dec-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.01
EX-2		22-Dec-97	36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		02-Mar-98	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		09-Apr-98	51.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		17-Jul-98	6.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		23-Oct-98	0.0070	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		14-Jan-99	8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		23-Apr-99	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		15-Jul-99	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		14-Oct-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		12-Jan-00	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		26-Apr-00	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		26-Jul-00	6.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
DUP		26-Jul-00	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		09-Oct-00	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		16-Jan-01	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		16-Apr-01	7.4 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		03-Jul-01	0.0065 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		12-Oct-01	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		16-Jan-02	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		09-Apr-02	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		09-Jul-02	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		08-Oct-02	0.049	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		13-Jan-03	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		14-Apr-03	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		07-Jul-03	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		29-Oct-03	0.57	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		23-Jan-04	0.0075	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		06-May-04	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		14-Jul-04	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		11-Oct-04	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		21-Jan-05	0.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		20-Apr-05	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		22-Jul-05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		26-Oct-05	0.031 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		27-Jan-06	2.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-2		20-Apr-06	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		15-Sep-95	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		18-Oct-95	170	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		18-Apr-96	200	NA	NA	NA	< 0.002	NA	NA	NA	NA	NA	NA
EX-3		01-Aug-96	170	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		18-Dec-96	270	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		15-Apr-97	220	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-3		01-Jul-97	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		22-Sep-97	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		02-Dec-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02
EX-3		19-Dec-97	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		02-Mar-98	240	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		09-Apr-98	141	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		17-Jul-98	< 125 U5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		22-Oct-98	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		22-Oct-98	122	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		14-Jan-99	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		23-Apr-99	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		16-Jul-99	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		13-Oct-99	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02
EX-3		25-Jan-00	72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		26-Apr-00	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		26-Jul-00	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		09-Oct-00	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Oct-00	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		16-Jan-01	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		23-Jan-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02
EX-3		13-Apr-01	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		03-Jul-01	120 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		12-Oct-01	87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		16-Jan-02	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		09-Apr-02	97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		30-Aug-02	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		08-Oct-02	74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		13-Jan-03	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		16-Apr-03	95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		07-Jul-03	98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-3		29-Oct-03	78	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		23-Jan-04	86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		06-May-04	72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		14-Jul-04	77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		11-Oct-04	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		21-Jan-05	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		20-Apr-05	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		22-Jul-05	72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		26-Oct-05	75 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		27-Jan-06	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-3		20-Apr-06	94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		11-Sep-98	0.0062	< 0.20	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.00020	< 0.0050	< 0.010	< 0.050	< 0.020
EX-4		22-Oct-98	< 0.0094 U5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		14-Jan-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Jan-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		23-Apr-99	0.065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		15-Jul-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		15-Oct-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		12-Jan-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		26-Apr-00	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		26-Jul-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		09-Oct-00	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		16-Jan-01	0.048	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		16-Apr-01	0.01 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		03-Jul-01	0.053 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		16-Oct-01	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		09-Jan-02	0.064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		09-Apr-02	0.0061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		09-Jul-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		12-Dec-02	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-4		13-Jan-03	0.053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		14-Apr-03	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		08-Jul-03	0.045	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		29-Oct-03	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		29-Oct-03	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		23-Jan-04	0.0099	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		06-May-04	0.00943	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		06-May-04	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		14-Jul-04	0.095	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		11-Oct-04	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		11-Oct-04	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		21-Jan-05	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		20-Apr-05	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		22-Jul-05	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		26-Oct-05	0.6 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		27-Jan-06	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-4		20-Apr-06	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		11-Sep-98	0.072	< 0.20	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.00020	< 0.0050	< 0.010	< 0.050	< 0.020
EX-5		22-Oct-98	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		14-Jan-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		23-Apr-99	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		19-Jul-99	0.0086	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		15-Oct-99	0.071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		12-Jan-00	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		26-Apr-00	6.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		26-Jul-00	0.049	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		09-Oct-00	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		16-Jan-01	4.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		16-Apr-01	0.72 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		03-Jul-01	0.056 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
DUP		03-Jul-01	0.11 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		16-Oct-01	0.53	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		21-Jan-02	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		09-Apr-02	0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		09-Jul-02	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		08-Oct-02	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		13-Jan-03	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		14-Apr-03	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		07-Jul-03	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		29-Oct-03	0.73	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		23-Jan-04	0.0081	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		06-May-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		14-Jul-04	0.91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		14-Oct-04	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		21-Jan-05	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		20-Apr-05	2.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		22-Jul-05	0.64	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		26-Oct-05	0.0071 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		27-Jan-06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-5		20-Apr-06	0.0062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		11-Sep-98	4.3	< 0.20	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.00020	< 0.0050	< 0.010	< 0.050	< 0.020
DUP		11-Sep-98	4.2	< 0.20	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.00020	< 0.0050	< 0.010	< 0.050	< 0.020
EX-6		22-Oct-98	7.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		15-Jan-99	5.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		23-Apr-99	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		23-Apr-99	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		19-Jul-99	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		12-Oct-99	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02
EX-6		21-Jan-00	6.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		26-Apr-00	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-6		26-Jul-00	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		26-Jul-00	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		09-Oct-00	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		16-Jan-01	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		23-Jan-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02
EX-6		13-Apr-01	8.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		03-Jul-01	0.14 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		16-Oct-01	8.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		16-Jan-02	5.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		09-Apr-02	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		09-Jul-02	0.41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		10-Oct-02	7.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		13-Jan-03	9.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		13-Jan-03	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		14-Apr-03	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Apr-03	9.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		07-Jul-03	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		29-Oct-03	3.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		23-Jan-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		23-Jan-04	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		06-May-04	19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		06-May-04	18.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		14-Jul-04	2.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		11-Oct-04	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		21-Jan-05	6.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		20-Apr-05	9.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		22-Jul-05	0.41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		26-Oct-05	0.28 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		27-Jan-06	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		20-Apr-06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-6		30-Aug-06	2.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6	(d)	17-Apr-07	0.024	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		17-Apr-07	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		16-Oct-07	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		18-Apr-08	0.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		08-Oct-08	4.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		17-Apr-09	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		26-Oct-09	8.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		26-Oct-09	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		27-Apr-10	4.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-6		19-Oct-10	0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		11-Sep-98	138	< 0.40	< 0.010	< 0.010	< 0.0050	< 0.020	< 0.00020	< 0.0050	< 0.020	< 0.10	< 0.040
EX-7		22-Oct-98	12.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		14-Jan-99	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		23-Apr-99	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		15-Jul-99	19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		15-Oct-99	8.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		19-Jan-00	35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		26-Apr-00	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		26-Jul-00	57	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		09-Oct-00	74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		16-Jan-01	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		13-Apr-01	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		03-Jul-01	17 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		16-Oct-01	31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Oct-01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		16-Jan-02	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		09-Apr-02	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		09-Jul-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		15-Aug-02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-7		07-Nov-02	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		13-Jan-03	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		14-Apr-03	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		07-Jul-03	35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		29-Oct-03	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		23-Jan-04	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		06-May-04	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		14-Jul-04	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		14-Oct-04	8.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		21-Jan-05	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		20-Apr-05	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		22-Jul-05	8.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		26-Oct-05	4.4 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		27-Jan-06	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Jan-06	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		20-Apr-06	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		20-Apr-06	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		17-Apr-07	9.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		18-Apr-08	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		17-Apr-09	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-7		30-Apr-10	8.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		30-Apr-10	3.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		11-Sep-98	364	< 0.80	< 0.020	< 0.020	< 0.0050	< 0.040	< 0.00020	< 0.0050	< 0.040	< 0.20	0.44
EX-8		22-Oct-98	133	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		14-Jan-99	57	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		23-Apr-99	450	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		19-Jul-99	430	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		15-Oct-99	170	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		21-Jan-00	250	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		26-Apr-00	410	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-8		26-Jul-00	340	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		09-Oct-00	390	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		16-Jan-01	720	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		16-Apr-01	570 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Apr-01	590 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		03-Jul-01	260 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		16-Oct-01	570	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		09-Jan-02	690	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		10-Apr-02	550	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		18-Dec-02	99	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		13-Jan-03	320	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		14-Apr-03	690	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		07-Jul-03	740	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		29-Oct-03	740	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		23-Jan-04	710	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		05-May-04	964	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		05-May-04	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		14-Jul-04	710	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		14-Oct-04	840	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		21-Jan-05	640	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		20-Apr-05	730	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		22-Jul-05	320	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		26-Oct-05	710 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		27-Jan-06	630	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		20-Apr-06	410	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		30-Aug-06	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8	(d)	18-Apr-07	470	0.065	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		18-Apr-07	450	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		17-Oct-07	460	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		18-Apr-08	53	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-8		08-Oct-08	430	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		17-Apr-09	540	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		28-Oct-09	790	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		30-Apr-10	550	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-8		19-Oct-10	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		11-Sep-98	109	< 0.20	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.00020	< 0.0050	< 0.010	< 0.050	0.44
EX-9		22-Oct-98	28.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		14-Jan-99	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		23-Apr-99	240	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		15-Jul-99	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		14-Oct-99	95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		21-Jan-00	94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		21-Jan-00	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		26-Apr-00	380	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		26-Jul-00	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		09-Oct-00	66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		16-Jan-01	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		13-Apr-01	220	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		03-Jul-01	190 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		12-Oct-01	99	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		21-Jan-02	270	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		09-Apr-02	240	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		30-Aug-02	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		12-Dec-02	81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		13-Jan-03	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		14-Apr-03	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		07-Jul-03	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		29-Oct-03	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		23-Jan-04	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		06-May-04	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
EX-9		14-Jul-04	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		14-Oct-04	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		21-Jan-05	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		20-Apr-05	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		22-Jul-05	99	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		26-Oct-05	37 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		27-Jan-06	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		20-Apr-06	250	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9	(d)	17-Apr-07	31	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		17-Apr-07	88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		18-Apr-08	35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		17-Apr-09	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EX-9		30-Apr-10	59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-1		01-Jun-89	200	NA	NA	< 0.04	< 0.3	NA	NA	NA	NA	NA	0.59
LF-1		07-Dec-89	190	NA	NA	< 0.04	< 0.3	NA	NA	NA	NA	NA	0.02
LF-1		20-Jul-90	120	0.06	NA	< 0.05	< 0.2	NA	NA	NA	NA	NA	0.26
LF-1		20-Jun-91	58	NA	NA	< 0.005	< 0.004	NA	NA	NA	NA	NA	0.236
LF-1		09-Jul-92	53.2	< 0.1	NA	0.058	< 0.04	< 0.01	< 0.00027	< 0.005	< 0.01	NA	NA
LF-1		09-Jun-93	39.8	< 0.1	NA	< 0.03	0.0039	< 0.01	< 0.0002	< 0.05	< 0.01	NA	NA
LF-10		07-Dec-89	0.65	NA	NA	< 0.04	< 0.3	NA	NA	NA	NA	NA	< 0.01
LF-10		19-Jul-90	0.012	0.11	NA	< 0.05	< 0.2	NA	NA	NA	NA	NA	< 0.05
DUP		19-Jul-90	0.008	0.14	NA	< 0.05	< 0.3	NA	NA	NA	NA	NA	0.07
LF-10		21-Dec-90	1	0.33	NA	0.0009	< 0.2	NA	NA	NA	NA	NA	< 0.05
DUP		21-Dec-90	1.1	0.35	NA	0.0007	< 0.3	NA	NA	NA	NA	NA	0.07
LF-10		20-Jun-91	0.657	NA	NA	< 0.005	0.013	NA	NA	NA	NA	NA	0.064
LF-10		06-Aug-91	1.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		18-Dec-91	0.704	NA	NA	< 0.005	< 0.003	< 0.010	NA	NA	NA	NA	0.028
DUP		18-Dec-91	0.549	NA	NA	< 0.005	< 0.003	< 0.010	NA	NA	NA	NA	< 0.020
LF-10		09-Jul-92	0.328	< 0.1	NA	< 0.005	< 0.04	< 0.01	< 0.00027	< 0.025	< 0.01	NA	NA
LF-10		31-Dec-92	0.55	< 0.1	NA	< 0.005	< 0.04	< 0.01	< 0.0002	< 0.005	< 0.01	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
DUP		31-Dec-92	0.552	<0.1	NA	<0.005	<0.04	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-10		09-Jun-93	0.958	0.249	NA	<0.005	<0.003	<0.01	<0.0002	<0.05	<0.01	NA	NA
LF-10		06-Jan-94	0.94	0.19	NA	<0.001	<0.001	<0.002	<0.0002	<0.004	0.002	NA	NA
DUP		06-Jan-94	0.82	0.18	NA	<0.001	0.001	<0.002	<0.0002	<0.004	0.002	NA	NA
LF-10		01-Aug-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3
LF-10		20-Nov-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.13
LF-10		02-Dec-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02
LF-10		27-Feb-98	0.77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		15-Jan-99	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		13-Oct-99	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02
LF-10		18-Jan-00	0.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		23-Jan-01	0.63	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02
LF-10		08-Jan-02	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		16-Jan-03	0.99	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		22-Jan-04	0.81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		05-May-04	1.597	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		14-Oct-04	2.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		20-Jan-05	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		24-Jan-06	0.98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		28-Aug-06	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		17-Apr-07	0.64	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10	(d)	17-Apr-07	0.16	0.56	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Apr-07	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		16-Oct-07	0.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		08-Oct-08	0.89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		15-Apr-09	0.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		26-Oct-09	0.48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		26-Apr-10	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-10		19-Oct-10	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		05-Dec-89	<0.07 U5	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	0.02

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-11		19-Jul-90	0.007	0.12	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
LF-11		21-Dec-90	0.011	0.18	NA	0.0006	<0.2	NA	NA	NA	NA	NA	<0.05
LF-11		21-Jun-91	0.023	NA	NA	<0.005	0.007	NA	NA	NA	NA	NA	<0.02
LF-11		21-Jun-91	0.024	NA	NA	<0.005	0.006	NA	NA	NA	NA	NA	<0.02
LF-11		06-Aug-91	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		17-Dec-91	0.011	NA	NA	<0.005	<0.003	<0.010	NA	NA	NA	NA	<0.020
LF-11		09-Jul-92	<0.01	0.169	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-11		31-Dec-92	<0.01	<0.1	NA	<0.005	<0.04	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-11		09-Jun-93	0.0116	0.152	NA	<0.005	<0.003	<0.01	<0.0002	<0.05	<0.01	NA	NA
LF-11		05-Jan-94	0.019	0.13	NA	<0.001	<0.001	<0.002	<0.0002	<0.004	0.001	NA	NA
LF-11		16-Apr-96	0.048	NA	NA	NA	<0.002	NA	NA	NA	NA	NA	NA
LF-11		31-Jul-96	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		20-Nov-96	0.45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		18-Mar-97	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		18-Mar-97	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		11-Jun-97	0.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		19-Aug-97	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Aug-97	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		17-Dec-97	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		02-Mar-98	2.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		10-Apr-98	2.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		10-Apr-98	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		16-Jul-98	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		23-Oct-98	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		14-Jan-99	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		22-Apr-99	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		22-Apr-99	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		16-Jul-99	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		12-Oct-99	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02
DUP		12-Oct-99	2.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-11		20-Jan-00	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		01-May-00	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		24-Jul-00	2.4 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		11-Oct-00	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		22-Jan-01	0.65	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.067
LF-11		10-Apr-01	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		10-Apr-01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		06-Jul-01	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		16-Oct-01	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		09-Jan-02	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		04-Apr-02	1.483	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		10-Apr-02	1.7 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		09-Jul-02	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		10-Oct-02	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		20-Jan-03	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		16-Apr-03	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		10-Jul-03	2.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		28-Oct-03	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		21-Jan-04	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		04-May-04	1.331	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		04-May-04	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		15-Jul-04	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		11-Oct-04	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		20-Jan-05	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		20-Apr-05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		20-Apr-05	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		21-Jul-05	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		26-Oct-05	1.9 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		24-Jan-06	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		07-Jul-06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-11		29-Aug-06	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		19-Apr-07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		17-Oct-07	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		16-Apr-08	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		08-Oct-08	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		15-Apr-09	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		26-Oct-09	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		27-Apr-10	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-11		19-Oct-10	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		06-Dec-89	< 0.07 U5	NA	NA	< 0.04	< 0.3	NA	NA	NA	NA	NA	0.02
LF-12		18-Jul-90	0.004	0.06	NA	< 0.05	< 0.3	NA	NA	NA	NA	NA	< 0.2
LF-12		19-Jun-91	< 0.01	NA	NA	< 0.005	< 0.004	NA	NA	NA	NA	NA	< 0.02
LF-12		16-Dec-91	< 0.010	NA	NA	< 0.005	< 0.003	< 0.010	NA	NA	NA	NA	0.024
LF-12		08-Jul-92	< 0.01	< 0.1	NA	< 0.005	< 0.04	< 0.01	< 0.00027	< 0.005	< 0.01	NA	NA
LF-12		30-Dec-92	0.014	< 0.1	NA	< 0.005	< 0.04	< 0.01	< 0.0002	< 0.005	< 0.01	NA	NA
LF-12		08-Jun-93	0.0152	< 0.1	NA	< 0.005	< 0.003	< 0.01	< 0.0002	< 0.05	< 0.01	NA	NA
LF-12		06-Jan-94	0.013	0.06	NA	< 0.001	< 0.001	0.006	< 0.0002	0.005	< 0.001	NA	NA
LF-12		16-Apr-96	0.043	NA	NA	NA	< 0.002	NA	NA	NA	NA	NA	NA
LF-12		30-Jul-96	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		30-Jul-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.81
LF-12		20-Nov-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1
LF-12		20-Nov-96	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		17-Mar-97	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		01-Jul-97	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		01-Jul-97	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		20-Aug-97	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		02-Dec-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.03
LF-12		18-Dec-97	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		26-Feb-98	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		08-Apr-98	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-12		14-Jul-98	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		21-Oct-98	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		12-Jan-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		20-Apr-99	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		14-Jul-99	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		11-Oct-99	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		18-Jan-00	0.0096	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		24-Jan-01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		09-Jan-02	0.0087	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		03-Apr-02	0.00942	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		16-Jan-03	0.0089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		20-Jan-04	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		18-Jan-05	0.0063	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		26-Jan-06	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		29-Aug-06	0.0094	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		17-Apr-07	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12	(d)	17-Apr-07	0.063	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		15-Oct-07	0.0059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		15-Oct-07	0.0051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		18-Apr-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		07-Oct-08	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		13-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		13-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		28-Oct-09	0.0055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		29-Apr-10	0.0075	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		19-Oct-10	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		18-Apr-12	0.0077	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		23-Apr-13	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-12		24-Apr-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		06-Dec-89	<0.07 U5	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	0.02

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-13		18-Jul-90	<0.002	<0.05	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
LF-13		19-Dec-90	<0.002	0.1	NA	<0.0005	<0.2	NA	NA	NA	NA	NA	<0.05
LF-13		19-Jun-91	<0.01	NA	NA	<0.005	<0.004	NA	NA	NA	NA	NA	<0.02
LF-13		16-Dec-91	<0.010	NA	NA	<0.005	<0.003	<0.010	NA	NA	NA	NA	<0.020
LF-13		09-Jul-92	<0.01	<0.1	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-13		30-Dec-92	<0.01	<0.1	NA	<0.005	<0.04	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-13		08-Jun-93	<0.01	<0.1	NA	<0.005	<0.003	<0.01	<0.0002	<0.05	<0.01	NA	NA
LF-13		05-Jan-94	0.003	0.04	NA	<0.005	<0.001	<0.002	<0.0002	<0.004	<0.001	NA	NA
LF-13		16-Apr-96	<0.002	NA	NA	NA	<0.002	NA	NA	NA	NA	NA	NA
LF-13		30-Jul-96	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		30-Jul-96	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		20-Nov-96	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		17-Mar-97	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Mar-97	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		12-Jun-97	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		19-Aug-97	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		18-Dec-97	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		25-Feb-98	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		07-Apr-98	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		07-Apr-98	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		13-Jul-98	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		19-Oct-98	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		11-Jan-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		19-Apr-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Apr-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		13-Jul-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		12-Oct-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02
LF-13		14-Jan-00	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		18-Jan-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02
DUP		18-Jan-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-13		10-Jan-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		10-Jan-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		16-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		20-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		18-Jan-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		25-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		16-Apr-07	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Apr-07	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-13		13-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-14		04-Sep-90	0.092	0.06	NA	<0.0005	0.007	NA	NA	NA	NA	NA	<0.05
LF-14		02-Oct-90	0.077	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-14		20-Dec-90	0.15	0.47	NA	0.0036	<0.2	NA	NA	NA	NA	NA	0.41
LF-14		20-Jun-91	0.095	NA	NA	<0.005	<0.004	NA	NA	NA	NA	NA	<0.02
LF-14		17-Dec-91	0.104	NA	NA	<0.005	<0.003	<0.010	NA	NA	NA	NA	<0.020
LF-14		31-Dec-92	0.121	<0.1	NA	<0.005	<0.04	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-14		09-Jun-93	0.102	<0.1	NA	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-15		04-Sep-90	0.002	0.06	NA	<0.0005	0.043	NA	NA	NA	NA	NA	<0.05
LF-15		20-Dec-90	0.007	0.23	NA	0.0007	<0.2	NA	NA	NA	NA	NA	0.1
LF-15		20-Jun-91	<0.01	NA	NA	<0.005	<0.004	NA	NA	NA	NA	NA	<0.02
LF-15		17-Dec-91	<0.010	NA	NA	<0.005	<0.003	<0.010	NA	NA	NA	NA	0.026
LF-15		08-Jul-92	<0.01	0.105	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-15		30-Dec-92	<0.01	<0.1	NA	<0.005	<0.04	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-15		09-Jun-93	<0.01	<0.1	NA	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-16		04-Sep-90	0.003	0.06	NA	<0.0005	<0.002	NA	NA	NA	NA	NA	<0.05
LF-16		20-Dec-90	0.003	0.17	NA	0.0007	<0.2	NA	NA	NA	NA	NA	0.07
LF-16		20-Jun-91	0.01	NA	NA	<0.005	<0.004	NA	NA	NA	NA	NA	<0.02
LF-16		17-Dec-91	<0.010	NA	NA	<0.005	<0.003	<0.010	NA	NA	NA	NA	0.025
LF-16		09-Jul-92	<0.01	<0.1	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-16		30-Dec-92	<0.01	<0.1	NA	<0.005	<0.04	<0.01	<0.0002	<0.005	<0.01	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-16		09-Jun-93	< 0.01	< 0.1	NA	< 0.005	< 0.003	< 0.01	< 0.0002	< 0.005	< 0.01	NA	NA
LF-17		24-Nov-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.01
LF-17		02-Mar-98	65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		10-Apr-98	80.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		16-Jul-98	58.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		23-Oct-98	76.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		15-Jan-99	46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		22-Apr-99	45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		16-Jul-99	59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		13-Oct-99	66	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02
DUP		13-Oct-99	67	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		20-Jan-00	51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		23-Jan-01	38	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02
LF-17		10-Jan-02	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		20-Jan-03	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		22-Jan-04	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		20-Jan-05	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		24-Jan-06	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		30-Aug-06	35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		18-Apr-07	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		17-Oct-07	38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Oct-07	35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		15-Apr-08	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		09-Oct-08	39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Oct-08	42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		15-Apr-09	31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		27-Oct-09	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		26-Apr-10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		26-Apr-10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-17		19-Oct-10	22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-18		11-Apr-96	0.012	NA	NA	NA	<0.002	NA	NA	NA	NA	NA	NA
LF-18		30-Jul-96	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		20-Nov-96	0.043	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		19-Mar-97	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		11-Jun-97	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		11-Jun-97	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		19-Aug-97	0.048	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		25-Nov-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.01
LF-18		17-Dec-97	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		27-Feb-98	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		08-Apr-98	0.0066	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		15-Jul-98	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		15-Jul-98	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		21-Oct-98	0.0091	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		13-Jan-99	0.0068	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		21-Apr-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		21-Apr-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		14-Jul-99	0.0083	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		13-Oct-99	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02
LF-18		19-Jan-00	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		22-Jan-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02
LF-18		10-Jan-02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		20-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		21-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		05-May-04	0.00306	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		19-Jan-05	0.0077	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		24-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		20-Apr-07	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		16-Oct-07	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		14-Apr-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-18		16-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		27-Apr-10	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		16-Apr-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Apr-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		23-Apr-13	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-18		29-Apr-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-19		13-Jun-97	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-19		19-Aug-97	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-19		01-Dec-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.19
LF-19		27-Feb-98	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-19		08-Apr-98	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-19		15-Jul-98	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-19		23-Oct-98	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		23-Oct-98	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-19		13-Jan-99	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-19		20-Apr-99	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-19		14-Jul-99	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-19		15-Oct-99	0.0094	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-2		02-Jun-89	2.6	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	0.01
LF-2		07-Dec-89	17	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	<0.01
LF-2		20-Jul-90	110	0.45	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
LF-20		11-Apr-96	<0.002	NA	NA	NA	<0.002	NA	NA	NA	NA	NA	NA
LF-20		30-Jul-96	0.085	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		21-Nov-96	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		18-Mar-97	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		11-Jun-97	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		19-Aug-97	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		01-Dec-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01
LF-20		18-Dec-97	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		27-Feb-98	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-20		09-Apr-98	0.075	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Apr-98	0.093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		16-Jul-98	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		23-Oct-98	0.056	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		13-Jan-99	0.096	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		13-Jan-99	0.079	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		21-Apr-99	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		15-Jul-99	0.094	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		14-Oct-99	0.081	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		20-Jan-00	0.092	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		01-May-00	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		24-Jul-00	0.15 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		11-Oct-00	0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		22-Jan-01	0.079	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02
LF-20		10-Apr-01	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		06-Jul-01	< 0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		15-Oct-01	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		09-Jan-02	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		09-Apr-02	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		09-Jul-02	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		10-Oct-02	0.086	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		20-Jan-03	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		16-Apr-03	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		09-Jul-03	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		28-Oct-03	0.073	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		21-Jan-04	0.096	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		04-May-04	1.097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		04-May-04	0.067	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		15-Jul-04	0.083	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		11-Oct-04	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-20		19-Jan-05	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		19-Apr-05	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Apr-05	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		21-Jul-05	0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		26-Oct-05	0.11 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		24-Jan-06	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		19-Apr-06	0.054	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Apr-06	0.053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		28-Aug-06	0.075	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		17-Apr-07	0.065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		16-Oct-07	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		14-Apr-08	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		08-Oct-08	0.072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		17-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		27-Oct-09	0.055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		27-Apr-10	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Apr-10	0.0075	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-20		18-Oct-10	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		10-Apr-96	<0.002	NA	NA	NA	<0.002	NA	NA	NA	NA	NA	NA
LF-21		31-Jul-96	0.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		21-Nov-96	0.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		18-Mar-97	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		11-Jun-97	0.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		19-Aug-97	0.53	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		02-Dec-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02
LF-21		17-Dec-97	0.48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		02-Mar-98	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		02-Mar-98	0.41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		09-Apr-98	0.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		16-Jul-98	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-21		23-Oct-98	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		14-Jan-99	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		22-Apr-99	<0.093 U5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		15-Jul-99	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		15-Jul-99	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		12-Oct-99	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02
LF-21		20-Jan-00	0.059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		27-Apr-00	0.077	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		24-Jul-00	0.012 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		11-Oct-00	0.42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		23-Jan-01	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02
DUP		23-Jan-01	0.2 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		10-Apr-01	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		06-Jul-01	<0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		18-Oct-01	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		09-Jan-02	0.051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		08-Apr-02	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		09-Jul-02	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		10-Oct-02	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		16-Jan-03	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		16-Apr-03	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Apr-03	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		09-Jul-03	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		28-Oct-03	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		21-Jan-04	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		04-May-04	0.393	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		04-May-04	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		15-Jul-04	0.093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		14-Oct-04	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Oct-04	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-21		20-Jan-05	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		19-Apr-05	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		21-Jul-05	0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		26-Oct-05	0.12 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		23-Jan-06	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		19-Apr-06	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		28-Aug-06	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		19-Apr-07	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-21		17-Oct-07	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		01-Aug-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1
LF-22		20-Nov-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.19
LF-22		24-Nov-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.01
LF-22		02-Mar-98	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		10-Apr-98	147	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		15-Jan-99	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		20-Jan-00	41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		02-Feb-01	22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		08-Jan-02	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		20-Jan-03	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		22-Jan-04	8.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		20-Jan-05	6.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		25-Jan-06	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		30-Aug-06	4.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		18-Apr-07	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		15-Oct-07	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		15-Apr-08	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		09-Oct-08	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		09-Oct-08	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		17-Apr-09	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		27-Oct-09	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
DUP		27-Oct-09	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		30-Apr-10	2.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-22		19-Oct-10	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		10-Apr-96	< 0.002	NA	NA	NA	< 0.002	NA	NA	NA	NA	NA	NA
DUP		10-Apr-96	0.004	NA	NA	NA	< 0.002	NA	NA	NA	NA	NA	NA
LF-23		02-Aug-96	< 0.009 U5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		21-Nov-96	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		18-Mar-97	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		11-Jun-97	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		20-Aug-97	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		18-Dec-97	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		26-Feb-98	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		08-Apr-98	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		15-Jul-98	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		21-Oct-98	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		12-Jan-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		21-Apr-99	0.0085	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		14-Jul-99	0.0068	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		21-Jul-00	< 0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-23		11-Oct-00	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		11-Apr-96	0.005	NA	NA	NA	< 0.002	NA	NA	NA	NA	NA	NA
LF-24		02-Aug-96	< 0.01 U5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		21-Nov-96	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		18-Mar-97	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		11-Jun-97	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		20-Aug-97	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		18-Dec-97	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		26-Feb-98	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		08-Apr-98	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		15-Jul-98	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-24		21-Oct-98	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		12-Jan-99	0.0072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		21-Apr-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		14-Jul-99	0.0061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		21-Jul-00	<0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		21-Jul-00	<0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		11-Oct-00	0.0065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		01-Nov-04	0.0086	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		29-Aug-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		19-Apr-07	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		15-Apr-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		16-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		23-Feb-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		16-Apr-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		19-Apr-13	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-24		13-May-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		13-May-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		11-Apr-96	<0.002	NA	NA	NA	<0.002	NA	NA	NA	NA	NA	NA
LF-25		02-Aug-96	0.07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		21-Nov-96	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		18-Mar-97	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		11-Jun-97	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		20-Aug-97	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		18-Dec-97	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		26-Feb-98	0.094	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		08-Apr-98	0.055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		15-Jul-98	0.063	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		21-Oct-98	0.044	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		12-Jan-99	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		21-Apr-99	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-25		14-Jul-99	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		21-Jul-00	0.12 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		11-Oct-00	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		01-Nov-04	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		29-Aug-06	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		19-Apr-07	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		15-Oct-07	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		15-Apr-08	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		15-Apr-08	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		22-Oct-08	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		22-Oct-08	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		16-Apr-09	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		23-Feb-12	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		16-Apr-12	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		19-Apr-13	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Apr-13	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-25		13-May-14	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		01-Dec-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.01
LF-26		27-Feb-98	0.07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		09-Apr-98	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		16-Jul-98	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		23-Oct-98	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		13-Jan-99	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		21-Apr-99	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		15-Jul-99	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		14-Oct-99	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		20-Jan-00	0.073	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		20-Jan-00	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		22-Jan-01	0.078	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		09-Jan-02	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-26		20-Jan-03	0.088	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		21-Jan-04	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		19-Jan-05	0.091	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		26-Jan-06	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		28-Aug-06	0.087	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26	(d)	17-Apr-07	0.045	0.68	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		17-Apr-07	0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		16-Oct-07	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		14-Apr-08	0.095	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		08-Oct-08	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		16-Apr-09	0.097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		27-Oct-09	0.073	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		26-Apr-10	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		18-Oct-10	0.063	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		18-Oct-10	0.051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-26		18-Apr-11	0.082	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		18-Apr-11	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		29-Dec-97	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		26-Feb-98	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		08-Apr-98	0.0097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		14-Jul-98	0.0080	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		21-Oct-98	0.0086	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		12-Jan-99	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		20-Apr-99	0.0068	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		14-Jul-99	0.0057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Jul-99	0.0064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		11-Oct-99	0.0094	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		17-Jan-00	0.0092	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Jan-00	0.0093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		24-Jan-01	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-27		09-Apr-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		09-Jan-02	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Jan-02	0.0075	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		03-Apr-02	0.00776	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		16-Jan-03	0.0076	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27	(c)	20-Jan-04	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		14-Jul-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Jul-04	0.0074	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		18-Jan-05	0.0061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		26-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		17-Apr-07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		15-Apr-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		13-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-27		29-Apr-10	0.0051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		29-Dec-97	0.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		26-Feb-98	0.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		08-Apr-98	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		14-Jul-98	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		21-Oct-98	0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		12-Jan-99	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		12-Jan-99	0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		20-Apr-99	0.42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		14-Jul-99	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		11-Oct-99	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		17-Jan-00	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		28-Apr-00	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		25-Jul-00	0.33 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		10-Oct-00	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		24-Jan-01	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		09-Apr-01	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-28		05-Jul-01	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		15-Oct-01	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		09-Jan-02	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		03-Apr-02	0.294	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		09-Apr-02	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		08-Jul-02	0.25 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		09-Oct-02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		16-Jan-03	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		16-Apr-03	0.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		09-Jul-03	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		29-Oct-03	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28	(c)	20-Jan-04	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		04-May-04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		15-Jul-04	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		13-Oct-04	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		18-Jan-05	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		20-Apr-05	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		19-Jul-05	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Jul-05	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		27-Oct-05	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Oct-05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		27-Jan-06	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		18-Apr-06	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		29-Aug-06	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		16-Apr-07	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		15-Oct-07	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		17-Apr-08	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		07-Oct-08	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		13-Apr-09	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		28-Oct-09	0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-28		29-Apr-10	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		19-Oct-10	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		12-Oct-11	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		18-Apr-12	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		23-Apr-13	0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-28		24-Apr-14	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		29-Dec-97	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		25-Feb-98	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		07-Apr-98	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		14-Jul-98	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		20-Oct-98	< 0.0050 UJ8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		11-Jan-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		20-Apr-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		20-Apr-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		13-Jul-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		11-Oct-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		11-Oct-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		17-Jan-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		24-Jan-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		09-Jan-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		03-Apr-02	0.00191	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		17-Jan-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		20-Jan-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		26-Jan-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		16-Apr-07	0.0074	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		15-Apr-08	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		13-Apr-09	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-29		29-Apr-10	0.0039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		02-Jun-89	27	NA	NA	< 0.04	< 0.3	NA	NA	NA	NA	NA	< 0.01
LF-3		07-Dec-89	30	NA	NA	< 0.04	< 0.3	NA	NA	NA	NA	NA	< 0.01

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-3		20-Jul-90	21	0.42	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
LF-3		20-Jun-91	60.4	NA	NA	<0.005	<0.004	NA	NA	NA	NA	NA	0.028
LF-3		09-Jul-92	70.8	0.473	NA	0.0205	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
DUP		09-Jul-92	66.6	0.452	NA	0.0361	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-3		09-Jun-93	142	0.625	NA	<0.1	<0.003	<0.01	<0.0002	<0.05	<0.01	NA	NA
DUP		09-Jun-93	141	0.635	NA	<0.1	<0.003	<0.01	<0.0002	<0.05	<0.01	NA	NA
LF-3		16-Apr-96	58	NA	NA	NA	<0.002	NA	NA	NA	NA	NA	NA
LF-3		31-Jul-96	72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		20-Nov-96	72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		19-Mar-97	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		12-Jun-97	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		19-Aug-97	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		02-Dec-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04
LF-3		17-Dec-97	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Dec-97	67	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		02-Mar-98	65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		10-Apr-98	25.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		16-Jul-98	117	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		19-Oct-98	142	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		15-Jan-99	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		15-Jan-99	31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		22-Apr-99	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		19-Jul-99	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		12-Oct-99	61	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.022
LF-3		20-Jan-00	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		01-May-00	35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		24-Jul-00	43 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		11-Oct-00	55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		16-Jan-01	39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		18-Jan-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.12

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-3		13-Apr-01	38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		06-Jul-01	47	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		15-Oct-01	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		10-Jan-02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		04-Apr-02	43.553	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		10-Apr-02	40 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		09-Jul-02	39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		10-Oct-02	43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		20-Jan-03	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		16-Apr-03	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		10-Jul-03	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		28-Oct-03	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		28-Oct-03	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		22-Jan-04	31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		05-May-04	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		05-May-04	45.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		15-Jul-04	32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		11-Oct-04	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		20-Jan-05	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		20-Apr-05	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		21-Jul-05	26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		26-Oct-05	27 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		24-Jan-06	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		19-Apr-06	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		29-Aug-06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		18-Apr-07	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		17-Oct-07	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		15-Apr-08	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		15-Apr-09	23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		27-Oct-09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-3		26-Apr-10	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-3		19-Oct-10	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		30-Dec-97	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		25-Feb-98	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		25-Feb-98	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		07-Apr-98	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		14-Jul-98	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		20-Oct-98	<0.0050 UJ8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		11-Jan-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		20-Apr-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		13-Jul-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		11-Oct-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		18-Jan-00	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		24-Jan-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		09-Jan-02	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		10-Apr-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		17-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		20-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		18-Jan-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-30		26-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-31		02-Jun-99	0.019	0.078	<0.002	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.005	<0.01	0.041
LF-31		13-Jul-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-31		11-Oct-99	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-32		22-Jun-99	<0.005	0.024	<0.002	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.005	<0.01	0.27
LF-32		16-Jul-99	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-32		25-Oct-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		25-Oct-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-33		22-Jun-99	0.0083	0.065	<0.002	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.005	<0.01	<0.02
DUP		22-Jun-99	<0.005	0.06	<0.002	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.005	<0.01	<0.02
LF-33		13-Jul-99	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-33		11-Oct-99	0.0073	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-34		22-Jun-99	0.057	0.035	< 0.002	< 0.005	< 0.003	< 0.01	< 0.0002	< 0.005	< 0.005	< 0.01	< 0.02
LF-34		13-Jul-99	0.056	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-34		11-Oct-99	0.058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		25-Oct-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		14-Jan-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		28-Apr-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		25-Jul-00	< 0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		25-Jul-00	< 0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		10-Oct-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		17-Jan-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		13-Apr-01	0.0077	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		05-Jul-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		15-Oct-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		08-Jan-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Jan-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		08-Apr-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Apr-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		08-Jul-02	< 0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		07-Oct-02	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		15-Jan-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		15-Apr-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		09-Jul-03	0.0062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		27-Oct-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		19-Jan-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		04-May-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		14-Jul-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		13-Oct-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		17-Jan-05	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		18-Apr-05	0.0083	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
DUP		18-Apr-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		18-Jul-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		24-Oct-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		23-Jan-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		17-Apr-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		18-Apr-07	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		17-Apr-08	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		14-Apr-09	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		30-Apr-10	0.0074	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		17-Apr-12	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		17-Apr-12	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		23-Oct-12	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		22-Apr-13	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-35		28-Apr-14	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		13-Jan-00	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		28-Apr-00	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		25-Jul-00	0.05 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		10-Oct-00	0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		17-Jan-01	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		09-Apr-01	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		02-Jul-01	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		12-Oct-01	0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		08-Jan-02	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		09-Apr-02	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		08-Jul-02	0.04 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		09-Oct-02	0.043	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		14-Jan-03	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		15-Apr-03	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		08-Jul-03	0.042	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		27-Oct-03	0.051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-36		19-Jan-04	0.046	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		03-May-04	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		12-Jul-04	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		12-Jul-04	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		14-Oct-04	0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		17-Jan-05	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		19-Apr-05	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		19-Jul-05	0.065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		27-Oct-05	0.046	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		27-Jan-06	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		18-Apr-06	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		29-Aug-06	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		29-Aug-06	0.042	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		19-Apr-07	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		16-Oct-07	0.042	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Oct-07	0.044	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		17-Apr-08	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Apr-08	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		07-Oct-08	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		07-Oct-08	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		14-Apr-09	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		28-Oct-09	0.062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		28-Oct-09	0.044	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		28-Apr-10	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		19-Oct-10	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		15-Apr-11	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		21-Jul-11	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		12-Oct-11	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		12-Oct-11	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		23-Feb-12	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-36		17-Apr-12	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		23-Oct-12	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		22-Apr-13	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		08-Oct-13	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		29-Apr-14	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-36		31-Oct-14	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		31-Oct-14	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		14-Jan-00	0.0074	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Jan-00	0.0062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		28-Apr-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		28-Apr-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		25-Jul-00	< 0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		10-Oct-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		17-Jan-01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		10-Apr-01	0.0057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		05-Jul-01	0.0098	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		12-Oct-01	0.0062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		08-Jan-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		08-Apr-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		08-Jul-02	0.0059 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Jul-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		10-Oct-02	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		10-Oct-02	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		15-Jan-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		15-Apr-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		15-Apr-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		08-Jul-03	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Jul-03	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		27-Oct-03	0.0091	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Oct-03	0.0064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-37		19-Jan-04	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		03-May-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		12-Jul-04	0.0078	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		13-Oct-04	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		19-Jan-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		18-Apr-05	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		18-Jul-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		24-Oct-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		23-Jan-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		18-Apr-06	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		19-Apr-07	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		16-Apr-08	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		14-Apr-09	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		30-Apr-10	0.0072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		17-Apr-12	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		23-Oct-12	0.0077	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		22-Apr-13	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		22-Apr-13	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		07-Oct-13	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		23-Apr-14	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-37		28-Oct-14	0.0069	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		14-Jan-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		28-Apr-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		25-Jul-00	< 0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		10-Oct-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		10-Oct-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		17-Jan-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Jan-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		10-Apr-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		05-Jul-01	0.0058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-38		12-Oct-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		08-Jan-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		08-Apr-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		08-Jul-02	<0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		10-Oct-02	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		15-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		15-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		15-Apr-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		08-Jul-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		27-Oct-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		19-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		03-May-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		12-Jul-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		13-Oct-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		19-Jan-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		18-Apr-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		18-Jul-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		24-Oct-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		23-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		18-Apr-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		19-Apr-07	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		16-Apr-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		14-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		28-Apr-10	0.0014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		17-Apr-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Apr-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		22-Apr-13	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-38		23-Apr-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		14-Jan-00	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		28-Apr-00	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-39		25-Jul-00	<0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		10-Oct-00	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		24-Jan-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		09-Apr-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		05-Jul-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		15-Oct-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		08-Jan-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		08-Apr-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		08-Jul-02	<0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		09-Oct-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		14-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		15-Apr-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		08-Jul-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		28-Oct-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		19-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		03-May-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		12-Jul-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		13-Oct-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		17-Jan-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		18-Apr-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		18-Jul-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		27-Oct-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		23-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		17-Apr-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		18-Apr-07	0.0083	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		17-Apr-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		15-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		28-Apr-10	0.0013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		17-Apr-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-39		22-Apr-13	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-39		22-Apr-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		22-Apr-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		02-Jun-89	0.53	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	<0.01
DUP		02-Jun-89	0.58	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	7
LF-4		06-Dec-89	0.42	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	<0.01
DUP		06-Dec-89	0.55	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	0.01
LF-4		20-Jul-90	0.19	0.16	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
LF-4		20-Jun-91	0.51	NA	NA	<0.005	0.015	NA	NA	NA	NA	NA	0.071
DUP		20-Jun-91	0.493	NA	NA	<0.005	0.01	NA	NA	NA	NA	NA	0.109
LF-4		09-Jul-92	0.367	0.119	NA	<0.005	<0.04	<0.01	<0.00027	<0.025	<0.01	NA	NA
LF-4		09-Jun-93	1.52	0.25	NA	<0.015	<0.003	<0.01	<0.0002	<0.025	<0.01	NA	NA
LF-4		02-Dec-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05
LF-4		02-Mar-98	0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		09-Apr-98	0.73	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		16-Jul-98	0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		19-Oct-98	0.47	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		14-Jan-99	0.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		22-Apr-99	0.98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		16-Jul-99	0.83	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Jul-99	0.86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		15-Oct-99	0.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		25-Jan-00	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		25-Jan-00	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		25-Jan-01	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		08-Jan-02	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		20-Jan-03	0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		22-Jan-04	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		05-May-04	0.228	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		20-Jan-05	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
DUP		20-Jan-05	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		25-Jan-06	0.082	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		28-Aug-06	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		18-Apr-07	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		18-Apr-07	0.0095	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		17-Oct-07	0.065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		14-Apr-08	0.076	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		08-Oct-08	0.081	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		16-Apr-09	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		26-Oct-09	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		26-Apr-10	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-4		18-Oct-10	0.092	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		14-Jan-00	0.0072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		28-Apr-00	<220	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		25-Jul-00	<0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		10-Oct-00	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		24-Jan-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		09-Apr-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Apr-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		05-Jul-01	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		15-Oct-01	0.0072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		08-Jan-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		08-Apr-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		08-Jul-02	0.011 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		09-Oct-02	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		14-Jan-03	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		15-Apr-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		08-Jul-03	0.0072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		28-Oct-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		19-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-40		03-May-04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		03-May-04	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		12-Jul-04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		13-Oct-04	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		17-Jan-05	0.0073	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		18-Apr-05	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		18-Jul-05	0.0075	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		27-Oct-05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		23-Jan-06	0.0055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		17-Apr-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Apr-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		18-Apr-07	0.0069	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		17-Apr-08	0.0085	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		15-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		28-Apr-10	0.0044	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		17-Apr-12	0.0055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		23-Oct-12	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		22-Apr-13	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		07-Oct-13	0.0071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		22-Apr-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-40		28-Oct-14	0.0093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		13-Jan-00	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		13-Jan-00	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		28-Apr-00	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		25-Jul-00	0.032 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		10-Oct-00	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		10-Oct-00	0.034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		17-Jan-01	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		09-Apr-01	0.034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		05-Jul-01	0.043	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-41		12-Oct-01	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		08-Jan-02	0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		04-Apr-02	0.0348	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		04-Apr-02	0.0365	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		08-Apr-02	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		08-Jul-02	0.036 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		09-Oct-02	0.048	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		15-Jan-03	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		15-Apr-03	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		09-Jul-03	0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		27-Oct-03	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		19-Jan-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		03-May-04	0.034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		12-Jul-04	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		13-Oct-04	0.043	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		17-Jan-05	0.044	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		19-Apr-05	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Apr-05	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		19-Jul-05	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		24-Oct-05	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		23-Jan-06	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		23-Jan-06	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		17-Apr-06	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		15-Apr-11	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		21-Jul-11	0.048	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		19-Oct-11	< 0.0071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		23-Feb-12	0.042	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		17-Apr-12	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		23-Oct-12	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		23-Oct-12	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-41		22-Apr-13	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		08-Oct-13	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		23-Apr-14	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		23-Apr-14	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-41		28-Oct-14	0.069	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		28-Oct-14	0.069	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		12-Jan-00	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		12-Jan-00	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		01-May-00	0.0091	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		01-May-00	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		24-Jul-00	0.0082 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		11-Oct-00	0.0058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		25-Jan-01	0.0074	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		10-Apr-01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		06-Jul-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		06-Jul-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		15-Oct-01	0.0093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		09-Jan-02	0.0056	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		09-Apr-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Apr-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		09-Jul-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		10-Oct-02	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		17-Jan-03	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		16-Apr-03	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		09-Jul-03	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		28-Oct-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		22-Jan-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		04-May-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		15-Jul-04	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		14-Oct-04	0.0083	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-42		19-Jan-05	0.0097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Jan-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		19-Apr-05	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		19-Jul-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		26-Oct-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		24-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		19-Apr-06	0.0068	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		19-Apr-07	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		14-Apr-08	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		16-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		26-Apr-10	0.0031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		17-Apr-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		22-Oct-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		22-Oct-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		24-Apr-13	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		09-Oct-13	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		25-Apr-14	<0.005 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		13-May-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-42		30-Oct-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		30-Oct-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-5		01-Jun-89	0.017	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	0.04
LF-5		06-Dec-89	<0.07 U5	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	<0.01
LF-5		20-Jul-90	0.02	0.17	NA	<0.05	<0.2	NA	NA	NA	NA	NA	0.05
LF-5		20-Jun-91	0.038	NA	NA	<0.005	0.003	NA	NA	NA	NA	NA	<0.02
LF-5		09-Jul-92	<0.01	0.111	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-5		09-Jun-93	0.0283	0.257	NA	<0.005	<0.003	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-6		01-Jun-89	13	NA	NA	0.09	<0.3	NA	NA	NA	NA	NA	0.12
LF-6		05-Dec-89	16	NA	NA	0.06	<0.3	NA	NA	NA	NA	NA	<0.01
LF-6		20-Jul-90	14	0.21	NA	<0.05	<0.2	NA	NA	NA	NA	NA	0.06

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-7		01-Jun-89	0.008	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	<0.01
LF-7		06-Dec-89	<0.07 U5	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	0.02
LF-7		19-Jul-90	<0.002	0.06	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
LF-7		20-Jun-91	0.012	NA	NA	<0.005	<0.004	NA	NA	NA	NA	NA	<0.02
LF-7		17-Dec-91	<0.010	NA	NA	<0.005	<0.003	<0.010	NA	NA	NA	NA	<0.020
LF-7		09-Jul-92	<0.01	<0.1	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
DUP		09-Jul-92	<0.01	<0.1	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-7		09-Jun-93	<0.01	0.191	NA	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.01	NA	NA
DUP		09-Jun-93	<0.01	0.201	NA	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-7		06-Jan-94	<0.002	0.07	NA	<0.001	0.001	<0.002	<0.0002	<0.004	<0.001	NA	NA
LF-7		01-Aug-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26
LF-7		22-Nov-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.12
LF-7		25-Nov-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.49
LF-7		27-Feb-98	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Feb-98	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-7		13-Jan-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-7		20-Jan-00	0.0088	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-7		25-Jan-01	0.0093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-7		09-Jan-02	0.0075	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-7		17-Jan-03	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-7		22-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-7		19-Jan-05	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-7		24-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-7		19-Apr-07	0.0057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Apr-07	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-7		14-Apr-08	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Apr-08	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-7		16-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-7		27-Apr-10	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		05-Dec-89	<0.07 U5	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	<0.01

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-8		19-Jul-90	<0.002	0.12	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
LF-8		21-Dec-90	0.02	0.59	NA	0.0015	<0.2	NA	NA	NA	NA	NA	0.25
LF-8		20-Jun-91	0.021	NA	NA	<0.005	<0.004	NA	NA	NA	NA	NA	<0.02
LF-8		17-Dec-91	0.016	NA	NA	<0.005	<0.003	<0.010	NA	NA	NA	NA	<0.020
LF-8		09-Jul-92	<0.01	<0.1	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-8		30-Dec-92	0.029	0.177	NA	<0.005	<0.04	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-8		09-Jun-93	0.0384	0.121	NA	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-8		06-Jan-94	0.055	0.1	NA	<0.001	<0.001	<0.002	<0.0002	0.005	<0.001	NA	NA
LF-8		25-Nov-97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01
LF-8		27-Feb-98	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		08-Apr-98	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		15-Jul-98	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		21-Oct-98	0.030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		13-Jan-99	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		21-Apr-99	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		14-Jul-99	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		15-Oct-99	0.049	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		19-Jan-00	0.043	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		22-Jan-01	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		09-Jan-02	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		20-Jan-03	0.051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		20-Jan-03	0.061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		21-Jan-04	0.054	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		19-Jan-05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		24-Jan-06	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		28-Aug-06	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		28-Aug-06	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		20-Apr-07	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		16-Oct-07	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		14-Apr-08	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-8		08-Oct-08	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Oct-08	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		16-Apr-09	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		26-Oct-09	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		26-Apr-10	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-8		18-Oct-10	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-9		05-Dec-89	0.067	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	0.02
LF-9		19-Jul-90	0.008	0.11	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
LF-9		21-Dec-90	0.12	0.27	NA	0.0029	<0.2	NA	NA	NA	NA	NA	0.73
LF-9		20-Jun-91	0.075	NA	NA	<0.005	0.012	NA	NA	NA	NA	NA	0.1
LF-9		06-Aug-91	0.131	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-9		16-Dec-91	0.046	NA	NA	<0.005	<0.003	<0.010	NA	NA	NA	NA	0.039
LF-9		09-Jul-92	<0.01	<0.1	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-9		30-Dec-92	0.106	<0.1	NA	<0.005	<0.04	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-9		09-Jun-93	0.158	0.169	NA	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-B1	(a)	07-Dec-89	<0.07 U5	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	<0.01
LF-B1		18-Jul-90	0.007	0.08	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
LF-B1		20-Dec-90	0.005	0.1	NA	0.001	<0.2	NA	NA	NA	NA	NA	<0.05
LF-B1		20-Jun-91	<0.01	NA	NA	<0.005	0.004	NA	NA	NA	NA	NA	<0.02
LF-B1		16-Dec-91	<0.010	NA	NA	<0.005	<0.003	<0.010	NA	NA	NA	NA	<0.020
LF-B1		09-Jul-92	<0.01	0.122	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-B1		30-Dec-92	<0.01	<0.1	NA	<0.005	<0.04	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-B1		08-Jun-93	<0.01	<0.1	NA	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-B2		06-Dec-89	<0.07 U5	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	0.02
LF-B2		18-Jul-90	0.005	0.14	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
DUP		18-Jul-90	0.004	0.15	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
LF-B2		19-Dec-90	0.008	0.32	NA	0.0026	<0.2	NA	NA	NA	NA	NA	0.17
LF-B2		20-Jun-91	<0.01	NA	NA	<0.005	0.005	NA	NA	NA	NA	NA	0.075
LF-B2		16-Dec-91	<0.010	NA	NA	<0.005	<0.003	<0.010	NA	NA	NA	NA	<0.020
LF-B2		08-Jul-92	<0.01	0.245	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-B2		08-Jun-93	<0.01	0.233	NA	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-B3		07-Dec-89	<0.07 U5	NA	NA	<0.04	<0.3	NA	NA	NA	NA	NA	0.01
LF-B3		18-Jul-90	0.003	0.1	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
LF-B3		20-Dec-90	0.002	0.16	NA	<0.0005	<0.2	NA	NA	NA	NA	NA	<0.05
LF-B3		19-Jun-91	<0.01	NA	NA	<0.005	<0.004	NA	NA	NA	NA	NA	<0.02
LF-B3		16-Dec-91	<0.010	NA	NA	<0.005	<0.003	<0.010	NA	NA	NA	NA	<0.020
LF-B3		08-Jul-92	<0.01	0.133	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-B3		30-Dec-92	<0.01	0.112	NA	<0.005	<0.04	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-B3		08-Jun-93	<0.01	<0.1	NA	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-B3		05-Jan-94	0.004	0.11	NA	0.006	<0.001	<0.002	<0.0002	<0.004	<0.001	NA	NA
LF-B3		16-Apr-96	0.036	NA	NA	NA	<0.002	NA	NA	NA	NA	NA	NA
LF-B3		01-Aug-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2
LF-B3		01-Aug-96	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		21-Nov-96	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		21-Nov-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05
DUP		21-Nov-96	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		17-Mar-97	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		12-Jun-97	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		20-Aug-97	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		17-Dec-97	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		27-Feb-98	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		08-Apr-98	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		15-Jul-98	0.0058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		21-Oct-98	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		13-Jan-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		22-Apr-99	<0.015 U5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		15-Jul-99	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		14-Oct-99	0.0086	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		25-Jan-00	0.0073	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		25-Jan-01	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-B3		15-Oct-01	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		15-Oct-01	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		10-Jan-02	0.0088	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		16-Jan-03	0.0097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		21-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		21-Jan-04	0.0095	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		20-Jan-05	0.0093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		24-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		19-Apr-07	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		16-Apr-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		15-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B3		30-Apr-10	0.0075	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		17-Jul-90	0.003	0.08	NA	<0.05	<0.2	NA	NA	NA	NA	NA	<0.05
LF-B4		19-Dec-90	<0.002	0.08	NA	0.0014	<0.2	NA	NA	NA	NA	NA	0.08
LF-B4		19-Jun-91	<0.01	NA	NA	<0.005	<0.004	NA	NA	NA	NA	NA	<0.02
LF-B4		17-Dec-91	<0.010	NA	NA	<0.005	<0.003	<0.010	NA	NA	NA	NA	0.029
LF-B4		08-Jul-92	<0.01	0.14	NA	<0.005	<0.04	<0.01	<0.00027	<0.005	<0.01	NA	NA
LF-B4		30-Dec-92	<0.01	0.11	NA	<0.005	<0.04	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-B4		08-Jun-93	<0.01	<0.1	NA	<0.005	<0.003	<0.01	<0.0002	<0.005	<0.01	NA	NA
LF-B4		05-Jan-94	0.003	0.07	NA	<0.001	0.001	<0.002	<0.0002	<0.004	<0.001	NA	NA
LF-B4		16-Apr-96	<0.002	NA	NA	NA	<0.002	NA	NA	NA	NA	NA	NA
LF-B4		30-Jul-96	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		30-Jul-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.08
LF-B4		22-Nov-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04
LF-B4		22-Nov-96	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		22-Nov-96	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		17-Mar-97	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		01-Jul-97	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		20-Aug-97	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		18-Dec-97	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-B4		25-Feb-98	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		07-Apr-98	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		15-Jul-98	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		19-Oct-98	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		11-Jan-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		20-Apr-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		14-Jul-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		14-Oct-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		18-Jan-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		24-Jan-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		24-Jan-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		09-Jan-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		16-Jan-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		21-Jan-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		18-Jan-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		18-Jan-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		26-Jan-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		16-Apr-07	0.0054	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B4		13-Apr-09	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5	(b)	09-Apr-96	0.32	NA	NA	NA	< 0.002	NA	NA	NA	NA	NA	NA
LF-B5		01-Aug-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.15
LF-B5		01-Aug-96	0.097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		22-Nov-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.03
LF-B5		22-Nov-96	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		17-Mar-97	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		12-Jun-97	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		20-Aug-97	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		17-Dec-97	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		27-Feb-98	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		09-Apr-98	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-B5	(b)	16-Jul-98	0.051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		16-Jul-98	0.053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		23-Oct-98	0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		13-Jan-99	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		21-Apr-99	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		15-Jul-99	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		15-Oct-99	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		15-Oct-99	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		21-Jan-00	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		02-Feb-01	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		10-Jan-02	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		20-Jan-03	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		22-Jan-04	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		22-Jan-04	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		20-Jan-05	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		25-Jan-06	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		30-Aug-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		30-Aug-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		18-Apr-07	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		15-Oct-07	0.0064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		15-Apr-08	0.0056	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		09-Oct-08	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		09-Oct-08	0.0088	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		17-Apr-09	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		27-Oct-09	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		30-Apr-10	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B5		18-Oct-10	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		09-Apr-96	0.08	NA	NA	NA	< 0.002	NA	NA	NA	NA	NA	NA
LF-B6		01-Aug-96	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		01-Aug-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.06

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
LF-B6		25-Nov-96	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		25-Nov-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04
DUP		25-Nov-96	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		17-Mar-97	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		12-Jun-97	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		19-Aug-97	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		18-Dec-97	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		27-Feb-98	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		08-Apr-98	0.0067	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		15-Jul-98	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		19-Oct-98	0.0080	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		13-Jan-99	0.0083	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		21-Apr-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		14-Jul-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		15-Oct-99	0.0059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		21-Jan-00	0.0061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		25-Jan-01	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		25-Jan-01	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		10-Apr-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		10-Jan-02	0.0097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		17-Jan-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		22-Jan-04	0.0096	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		19-Jan-05	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		25-Jan-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		25-Jan-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		17-Apr-07	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		14-Apr-08	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		16-Apr-09	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF-B6		26-Apr-10	0.0044	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-1		05-May-03	0.035	na	na	na	na	na	na	na	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
MD-1		14-Oct-03	< 0.005	na	na	na	< 0.003	na	na	na	na	na	na
MD-1		20-Jan-04	0.029	na	na	na	< 0.003	na	na	na	na	na	na
MD-1		27-Apr-04	0.017	na	na	na	< 0.003	na	na	na	na	na	na
MD-1		22-Oct-04	0.042	na	na	na	< 0.003	na	na	na	na	na	na
MD-1		30-Sep-05	0.060	na	na	na	< 0.003	na	na	na	na	na	na
MD-1		15-Apr-06	0.012	na	na	na	na	na	na	na	na	na	na
MD-1		26-Oct-06	0.044	na	na	na	na	na	na	na	na	na	na
MD-1		12-Apr-07	0.023	na	na	na	na	na	na	na	na	na	na
MD-1		12-Oct-07	< 0.0061	na	na	na	na	na	na	na	na	na	na
MD-1		22-Apr-08	0.015	na	na	na	na	na	na	na	na	na	na
MD-1		22-Oct-08	0.014	na	na	na	na	na	na	na	na	na	na
MD-1		24-Apr-09	0.025	na	na	na	na	na	na	na	na	na	na
MD-1		21-Oct-09	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-1		29-Apr-10	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-1		27-Oct-10	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-1		14-Nov-11	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-1		17-Oct-12	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-1		08-Oct-13	0.0085	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-1		27-Oct-14	0.049	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-2		05-May-03	na	na	na	na	< 0.003	na	na	na	na	na	na
MD-2		14-Oct-03	0.013	na	na	na	< 0.003	na	na	na	na	na	na
MD-2		20-Jan-04	0.011	na	na	na	< 0.003	na	na	na	na	na	na
MD-2		27-Apr-04	0.030	na	na	na	< 0.003	na	na	na	na	na	na
MD-2		22-Oct-04	0.023	na	na	na	< 0.003	na	na	na	na	na	na
MD-2		30-Sep-05	0.025	na	na	na	< 0.003	na	na	na	na	na	na
MD-2		15-Apr-06	0.015	na	na	na	na	na	na	na	na	na	na
MD-2		26-Oct-06	0.031	na	na	na	na	na	na	na	na	na	na
MD-2		12-Apr-07	0.024	na	na	na	na	na	na	na	na	na	na
MD-2		12-Oct-07	0.011	na	na	na	na	na	na	na	na	na	na
MD-2		22-Apr-08	0.019	na	na	na	na	na	na	na	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
MD-2		22-Oct-08	0.0093	na	na	na	na	na	na	na	na	na	na
MD-2		24-Apr-09	0.0240	na	na	na	na	na	na	na	na	na	na
MD-2		21-Oct-09	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-2		29-Apr-10	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		29-Apr-10	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-2		27-Oct-10	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-2		14-Nov-11	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		07-Oct-12	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-2		17-Oct-12	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-2		07-Oct-13	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Oct-13	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-2		27-Oct-14	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Oct-14	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-3		05-May-03	0.180	na	na	na	< 0.003	na	na	na	na	na	na
MD-3		14-Oct-03	< 0.005	na	na	na	< 0.003	na	na	na	na	na	na
MD-3		20-Jan-04	0.180	na	na	na	< 0.003	na	na	na	na	na	na
MD-3		27-Apr-04	0.120	na	na	na	< 0.003	na	na	na	na	na	na
MD-3		22-Oct-04	0.210	na	na	na	< 0.003	na	na	na	na	na	na
MD-3		30-Sep-05	0.310	na	na	na	< 0.003	na	na	na	na	na	na
MD-3		15-Apr-06	0.330	na	na	na	na	na	na	na	na	na	na
MD-3		26-Oct-06	0.350	na	na	na	na	na	na	na	na	na	na
MD-3		12-Apr-07	0.400	na	na	na	na	na	na	na	na	na	na
MD-3		12-Oct-07	0.410	na	na	na	na	na	na	na	na	na	na
MD-3		22-Apr-08	0.330	na	na	na	na	na	na	na	na	na	na
MD-3		22-Oct-08	0.340	na	na	na	na	na	na	na	na	na	na
MD-3		24-Apr-09	0.260	na	na	na	na	na	na	na	na	na	na
MD-3		21-Oct-09	0.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-3		29-Apr-10	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-3		27-Oct-10	0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-3		14-Nov-11	0.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
MD-3		17-Oct-12	0.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-3		07-Oct-13	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-3		27-Oct-14	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-4		05-May-03	< 0.005	na	na	na	< 0.003	na	na	na	na	na	na
MD-4		14-Oct-03	0.0084	na	na	na	< 0.003	na	na	na	na	na	na
MD-4		20-Jan-04	< 0.005	na	na	na	< 0.003	na	na	na	na	na	na
MD-4		27-Apr-04	0.0072	na	na	na	< 0.003	na	na	na	na	na	na
MD-4		22-Oct-04	< 0.005	na	na	na	< 0.003	na	na	na	na	na	na
MD-4		30-Sep-05	< 0.005	na	na	na	< 0.003	na	na	na	na	na	na
MD-4		15-Apr-06	< 0.005	na	na	na	na	na	na	na	na	na	na
MD-4		26-Oct-06	0.0076	na	na	na	na	na	na	na	na	na	na
MD-4		12-Apr-07	ND	na	na	na	na	na	na	na	na	na	na
MD-4		12-Oct-07	< 0.0061	na	na	na	na	na	na	na	na	na	na
MD-4		22-Apr-08	< 0.0061	na	na	na	na	na	na	na	na	na	na
MD-4		22-Oct-08	< 0.005	na	na	na	na	na	na	na	na	na	na
MD-4		24-Apr-09	< 0.005	na	na	na	na	na	na	na	na	na	na
MD-4		21-Oct-09	0.0056	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-4		29-Apr-10	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-4		27-Oct-10	0.0066	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Oct-10	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-4		14-Nov-11	< 0.0061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-4		08-Oct-12	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-4		17-Oct-13	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-4		27-Oct-14	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-5		05-May-03	0.00421	na	na	na	na	na	na	na	na	na	na
MD-5		13-Oct-03	0.0125	na	na	na	na	na	na	na	na	na	na
MD-5		20-Jan-04	0.00492	na	na	na	na	na	na	na	na	na	na
DUP		20-Jan-04	0.0042	na	na	na	na	na	na	na	na	na	na
MD-5		21-Apr-04	0.00979	na	na	na	na	na	na	na	na	na	na
MD-5		21-Oct-04	0.00562	na	na	na	na	na	na	na	na	na	na

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
MD-5		29-Mar-05	0.0229	na	na	na	na	na	na	na	na	na	na
MD-5		21-Sep-05	0.0112	na	na	na	na	na	na	na	na	na	na
MD-5		30-Sep-05	0.0097	na	na	na	< 0.003	na	na	na	na	na	na
MD-5		13-Apr-06	0.00395	na	na	na	na	na	na	na	na	na	na
MD-5		26-Oct-06	0.0097	na	na	na	na	na	na	na	na	na	na
MD-5		16-Apr-07	0.00631	na	na	na	na	na	na	na	na	na	na
MD-5		11-Oct-07	0.0149	na	na	na	na	na	na	na	na	na	na
MD-5		23-Apr-08	0.0115	na	na	na	na	na	na	na	na	na	na
MD-5		23-Oct-08	0.0125	na	na	na	na	na	na	na	na	na	na
DUP		23-Oct-08	0.0130	na	na	na	na	na	na	na	na	na	na
MD-5		24-Apr-09	0.0068	na	na	na	na	na	na	na	na	na	na
MD-5		21-Oct-09	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-5		29-Apr-10	0.00492	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-5		27-Oct-10	0.00649	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-5		19-Apr-11	0.00953	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Apr-11	0.00841	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-5		14-Nov-11	0.00479	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-5		17-Oct-12	0.0107	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-5		08-Oct-13	0.00899	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD-5		27-Oct-14	0.00977	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Oct-14	0.00971	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		29-Mar-95	0.0786	0.548	< 0	0.0068	0.0308	0.091	< 0	< 0	< 0	NA	0.462
MW-1		08-Jun-95	0.04	0.35	< 0	< 0	0.02	< 0	< 0	< 0	< 0	NA	0.16
MW-1		09-Jan-96	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		17-Apr-96	0.034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		31-Jul-96	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		19-Nov-96	0.071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		25-Mar-97	0.042	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		10-Jun-97	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		18-Aug-97	0.077	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
MW-1		19-Dec-97	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		26-Feb-98	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		08-Apr-98	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Apr-98	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		14-Jul-98	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		21-Oct-98	0.020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		12-Jan-99	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		20-Apr-99	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		13-Jul-99	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		11-Oct-99	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		18-Jan-00	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		24-Jan-01	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		16-Jan-03	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1		26-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		29-Mar-95	0.0452	0.772	<0	<0	0.0557	0.188	<0	<0	<0	NA	0.449
MW-2		08-Jun-95	<0	0.59	<0	0.01	0.03	<0	<0	<0	<0	NA	0.24
MW-2		09-Jan-96	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		17-Apr-96	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		31-Jul-96	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		19-Nov-96	0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		25-Mar-97	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		10-Jun-97	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		18-Aug-97	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		19-Dec-97	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		26-Feb-98	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		08-Apr-98	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		14-Jul-98	0.020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		21-Oct-98	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		21-Oct-98	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		12-Jan-99	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
MW-2		24-Jan-01	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		08-Jan-02	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		16-Jan-03	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		20-Jan-04	0.051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		18-Jan-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		25-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		16-Apr-07	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		17-Apr-08	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		17-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2		29-Apr-10	0.0097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		29-Mar-95	0.0276	0.102	<0	<0	0.007	0.0105	<0	<0	<0	NA	0.19
MW-3		08-Jun-95	0.03	0.21	<0	<0	0.01	<0	<0	<0	<0	NA	0.38
MW-3		09-Jan-96	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		17-Apr-96	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		31-Jul-96	0.059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		19-Nov-96	0.048	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		25-Mar-97	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		10-Jun-97	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		18-Aug-97	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		19-Dec-97	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		26-Feb-98	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		07-Apr-98	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		14-Jul-98	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Jul-98	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		20-Oct-98	0.018 J8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		11-Jan-99	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		11-Jan-99	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		19-Apr-99	0.0098	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		13-Jul-99	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		11-Oct-99	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
MW-3		17-Jan-00	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		28-Apr-00	0.0096	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		25-Jul-00	0.015 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		10-Oct-00	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		24-Jan-01	0.0093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		09-Apr-01	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		05-Jul-01	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		15-Oct-01	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		08-Jan-02	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		03-Apr-02	0.00435	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		08-Apr-02	0.0053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		08-Jul-02	0.017 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Jul-02	<0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		09-Oct-02	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		15-Jan-03	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		16-Apr-03	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		09-Jul-03	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		28-Oct-03	0.061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		20-Jan-04	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		20-Jan-04	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		04-May-04	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		15-Jul-04	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		13-Oct-04	0.053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		18-Jan-05	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		19-Apr-05	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		19-Jul-05	0.053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Jul-05	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		27-Oct-05	0.094	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		23-Jan-06	0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		17-Apr-06	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
MW-3		18-Apr-07	0.091	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		15-Apr-08	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		14-Apr-09	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		28-Apr-10	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		15-Apr-11	0.083	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		21-Jul-11	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		12-Oct-11	0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		23-Feb-12	0.059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		23-Feb-12	0.045	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		17-Apr-12	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		18-Jul-12	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		23-Oct-12	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		18-Jan-13	0.058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		22-Apr-13	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		16-Jul-13	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		08-Oct-13	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		03-Jan-14	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		29-Apr-14	0.053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3		30-Oct-14	0.074	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		16-Dec-94	8.87	0.163	< 0	0.141	0.0304	0.0359	< 0.0002	0.0275	0.0134	NA	71
MW-4		29-Mar-95	22	0.333	< 0	0.286	0.0636	0.031	< 0	< 0	< 0	NA	171
MW-4		08-Jun-95	46	0.56	0.01	0.42	0.06	< 0	< 0	< 0	< 0	NA	97
MW-4		10-Jan-96	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		19-Nov-96	NA	NA	NA	NA	< 0.04	NA	NA	NA	NA	NA	230
MW-4		19-Nov-96	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		18-Aug-97	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		19-Dec-97	42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		02-Mar-98	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		10-Apr-98	19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		17-Jul-98	19.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
MW-4		23-Oct-98	8.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		15-Jan-99	0.81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		22-Apr-99	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		16-Jul-99	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		25-Oct-99	0.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		25-Jan-00	0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		01-May-00	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		25-Jul-00	0.08 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		09-Oct-00	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		16-Jan-01	0.081	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		13-Apr-01	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		02-Jul-01	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		06-Jul-01	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		16-Oct-01	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		09-Jan-02	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		10-Apr-02	0.28 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		10-Apr-02	0.11 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		09-Jul-02	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		10-Oct-02	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		15-Jan-03	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		16-Apr-03	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		10-Jul-03	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		20-Jan-04	0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		06-May-04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		14-Jul-04	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		13-Oct-04	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		19-Jan-05	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		18-Apr-05	0.56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		19-Jul-05	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		27-Oct-05	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
MW-4		26-Jan-06	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		17-Apr-06	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		29-Aug-06	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		20-Apr-07	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		15-Oct-07	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		18-Apr-08	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		09-Oct-08	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		15-Apr-09	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		28-Oct-09	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		28-Apr-10	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4		19-Oct-10	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		16-Dec-94	41.5	0.236	<0	0.156	0.0317	0.056	0.00023	0.009	<0.01	NA	11
MW-5		29-Mar-95	35.3	0.137	<0	<0	0.0317	0.0103	<0	<0	<0	NA	4.67
MW-5		08-Jun-95	99	0.45	<0	0.03	0.05	<0	<0	<0	<0	NA	13.8
MW-5		10-Jan-96	79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		19-Nov-96	192	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		19-Nov-96	NA	NA	NA	NA	0.07	NA	NA	NA	NA	NA	21
MW-5		18-Aug-97	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		19-Dec-97	380	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		02-Mar-98	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		10-Apr-98	208	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		17-Jul-98	340	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		17-Jul-98	368	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		19-Oct-98	231	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		15-Jan-99	290	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		22-Apr-99	260	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		19-Jul-99	250	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Jul-99	250	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		25-Oct-99	260	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		25-Jan-00	240	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
MW-5		01-May-00	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		25-Jul-00	180 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		09-Oct-00	220	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		16-Jan-01	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		13-Apr-01	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		13-Apr-01	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		06-Jul-01	220	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		16-Oct-01	290	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Oct-01	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		09-Jan-02	170	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		10-Apr-02	250 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		09-Jul-02	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		10-Oct-02	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		15-Jan-03	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		15-Apr-03	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		10-Jul-03	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		28-Oct-03	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		20-Jan-04	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		04-May-04	49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		04-May-04	62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		14-Jul-04	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		13-Oct-04	170	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		19-Jan-05	81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		18-Apr-05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		19-Jul-05	35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		27-Oct-05	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		17-Apr-06	45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		30-Aug-06	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		17-Apr-07	71	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5	(d)	17-Apr-07	31	0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
MW-5		15-Oct-07	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		17-Apr-08	77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		07-Oct-08	46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		15-Apr-09	68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		15-Apr-09	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		27-Oct-09	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		28-Apr-10	65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5		19-Oct-10	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		28-Jul-94	0.07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		08-Sep-94	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		28-Feb-95	0.046	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		29-Mar-95	0.035	0.04	< 0.002	< 0.005	< 0.04	< 0.01	< 0.0002	< 0.004	< 0.005	< 0.005	0.01
RP-1		10-May-95	0.095	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		09-Aug-95	0.059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		17-Nov-95	0.086	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		10-Jan-96	0.061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		17-Apr-96	0.058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Apr-96	0.069	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		31-Jul-96	0.068	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		19-Nov-96	0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		25-Mar-97	0.054	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		10-Jun-97	0.077	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		18-Aug-97	0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		19-Dec-97	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Dec-97	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		26-Feb-98	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		26-Feb-98	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		07-Apr-98	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		14-Jul-98	0.044	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		20-Oct-98	< 0.0050 UJ	8 NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
RP-1		12-Jan-99	0.063	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		19-Apr-99	0.046	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		16-Jul-99	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		25-Oct-99	0.073	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		18-Jan-00	0.044	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		27-Apr-00	0.046	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		25-Jul-00	0.035 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		10-Oct-00	0.048	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		25-Jan-01	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		09-Apr-01	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		05-Jul-01	0.051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		05-Jul-01	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		12-Oct-01	0.055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		08-Jan-02	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		04-Apr-02	0.0435	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		08-Apr-02	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		08-Jul-02	0.052 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		09-Oct-02	0.07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		15-Jan-03	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		15-Apr-03	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		09-Jul-03	0.049	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		28-Oct-03	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		19-Jan-04	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		03-May-04	0.045	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		15-Jul-04	0.048	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		13-Oct-04	0.055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		19-Jan-05	0.043	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		19-Apr-05	0.034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		19-Jul-05	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		24-Oct-05	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
RP-1		23-Jan-06	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		17-Apr-06	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		18-Apr-07	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		15-Apr-08	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		14-Apr-09	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		28-Apr-10	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		15-Apr-11	0.049	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		21-Jul-11	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		23-Feb-12	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		17-Apr-12	0.051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		18-Jul-12	0.054	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		23-Oct-12	0.065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		18-Jan-13	0.048	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		22-Apr-13	0.076	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		16-Jul-13	0.076	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Jul-13	0.072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		07-Oct-13	0.055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		03-Jan-14	0.053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		03-Jan-14	0.063	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		23-Apr-14	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-1		31-Oct-14	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		28-Jul-94	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		08-Sep-94	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Sep-94	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		28-Feb-95	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		29-Mar-95	0.01	0.08	< 0.002	< 0.005	< 0.04	< 0.01	< 0.0002	< 0.004	< 0.005	< 0.005	0.03
RP-2		10-May-95	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		09-Aug-95	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		17-Nov-95	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		10-Jan-96	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
RP-2		17-Apr-96	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		31-Jul-96	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		19-Nov-96	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		25-Mar-97	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		10-Jun-97	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		18-Aug-97	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		18-Aug-97	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		19-Dec-97	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		26-Feb-98	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		07-Apr-98	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		13-Jul-98	0.0072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		20-Oct-98	0.010 J8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		11-Jan-99	0.0053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		19-Apr-99	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		13-Jul-99	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		25-Oct-99	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		18-Jan-00	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		18-Jan-00	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		27-Apr-00	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		25-Jul-00	0.014 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		10-Oct-00	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		17-Jan-01	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		09-Apr-01	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		05-Jul-01	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		12-Oct-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		09-Jan-02	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		08-Apr-02	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		08-Jul-02	0.023 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		09-Oct-02	0.034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Oct-02	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
RP-2		14-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		15-Apr-03	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		09-Jul-03	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Jul-03	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		27-Oct-03	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		19-Jan-04	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		03-May-04	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		12-Jul-04	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		13-Oct-04	0.034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		17-Jan-05	0.037	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		19-Apr-05	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		19-Jul-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		24-Oct-05	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		23-Jan-06	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		17-Apr-06	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		29-Aug-06	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		20-Apr-07	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		20-Apr-07	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		16-Oct-07	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		17-Apr-08	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		07-Oct-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		14-Apr-09	0.0097	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		28-Oct-09	0.042	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		28-Apr-10	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		18-Oct-10	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		15-Apr-11	0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		21-Jul-11	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		21-Jul-11	0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		12-Oct-11	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		23-Feb-12	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
RP-2		17-Apr-12	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		23-Oct-12	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		19-Apr-13	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		08-Oct-13	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		23-Apr-14	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-2		30-Oct-14	0.045	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		28-Jul-94	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		08-Sep-94	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		28-Feb-95	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		29-Mar-95	0.004	0.18	< 0.002	< 0.005	< 0.04	< 0.01	< 0.0002	< 0.004	< 0.005	0.015	0.01
RP-3		10-May-95	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		09-Aug-95	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		17-Nov-95	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		10-Jan-96	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		17-Apr-96	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		31-Jul-96	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		19-Nov-96	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		25-Mar-97	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		10-Jun-97	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		18-Aug-97	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		19-Dec-97	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		25-Feb-98	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		07-Apr-98	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		13-Jul-98	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		20-Oct-98	0.023 J8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		20-Oct-98	0.013 J8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		11-Jan-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		19-Apr-99	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		16-Jul-99	0.0065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		25-Oct-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
RP-3		14-Jan-00	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		27-Apr-00	0.0064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		25-Jul-00	0.011 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		10-Oct-00	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		17-Jan-01	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.021
RP-3		10-Apr-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		03-Jul-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		15-Oct-01	0.0058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		08-Jan-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		08-Apr-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		08-Jul-02	<0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		07-Oct-02	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		15-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		15-Apr-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		09-Jul-03	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		27-Oct-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		19-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		03-May-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		14-Jul-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		13-Oct-04	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		17-Jan-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		18-Apr-05	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		18-Jul-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		24-Oct-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		23-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		17-Apr-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		18-Apr-07	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		16-Apr-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Apr-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
RP-3		14-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		28-Apr-10	0.0024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		28-Apr-10	0.0025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		17-Apr-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		17-Apr-12	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		20-Dec-12	0.0081	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		20-Dec-12	0.0056	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		19-Apr-13	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		08-Oct-13	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Oct-13	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		28-Apr-14	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-3		28-Oct-14	0.0057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		28-Jul-94	<0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		08-Sep-94	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		28-Feb-95	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		28-Feb-95	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		29-Mar-95	0.008	0.06	<0.002	<0.005	0.15	<0.01	<0.0002	<0.004	<0.005	<0.005	0.16
RP-4		10-May-95	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		10-May-95	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		09-Aug-95	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Aug-95	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		17-Nov-95	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Nov-95	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		09-Jan-96	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		17-Apr-96	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		31-Jul-96	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		31-Jul-96	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		19-Nov-96	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		25-Mar-97	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		10-Jun-97	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
DUP		10-Jun-97	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		18-Aug-97	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		19-Dec-97	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		25-Feb-98	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		07-Apr-98	0.0061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		13-Jul-98	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		13-Jul-98	0.0052	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		20-Oct-98	0.0084 J8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		11-Jan-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		19-Apr-99	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		13-Jul-99	0.0059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		13-Jul-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		25-Oct-99	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		18-Jan-00	0.0089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		27-Apr-00	0.0078	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		25-Jul-00	0.0081 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		10-Oct-00	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		17-Jan-01	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.039
RP-4		09-Apr-01	0.0083	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		12-Oct-01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		08-Jan-02	0.0091	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		08-Apr-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		08-Jul-02	0.0082 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		07-Oct-02	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		14-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		15-Apr-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		08-Jul-03	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		27-Oct-03	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		19-Jan-04	0.0067	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		03-May-04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
RP-4		12-Jul-04	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		13-Oct-04	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		19-Jan-05	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		19-Apr-05	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		18-Jul-05	0.0068	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		24-Oct-05	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		24-Oct-05	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		23-Jan-06	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		18-Apr-06	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		18-Apr-06	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		29-Aug-06	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		19-Apr-07	0.0074	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		16-Oct-07	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		16-Apr-08	0.0098	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		07-Oct-08	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		14-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		28-Oct-09	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		28-Apr-10	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		18-Oct-10	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		15-Apr-11	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		15-Apr-11	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		21-Jul-11	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		12-Oct-11	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		23-Feb-12	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		17-Apr-12	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		18-Jul-12	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		18-Jul-12	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		23-Oct-12	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		18-Jan-13	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
DUP		18-Jan-13	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		19-Apr-13	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		16-Jul-13	0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		08-Oct-13	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		03-Jan-14	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		29-Apr-14	0.0099	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		29-Apr-14	0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-4		30-Oct-14	0.0061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		28-Jul-94	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		28-Jul-94	< 0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		08-Sep-94	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		28-Feb-95	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		29-Mar-95	0.006	0.04	< 0.002	< 0.005	< 0.04	< 0.01	< 0.0002	< 0.004	< 0.005	< 0.005	0.03
RP-5		10-May-95	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		09-Aug-95	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		17-Nov-95	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		09-Jan-96	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Jan-96	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		17-Apr-96	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		31-Jul-96	< 0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		19-Nov-96	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Nov-96	0.008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		25-Mar-97	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		25-Mar-97	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		10-Jun-97	0.006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		18-Aug-97	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		19-Dec-97	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		26-Feb-98	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		07-Apr-98	0.0058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		13-Jul-98	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
RP-5		20-Oct-98	0.053 J8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		12-Jan-99	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		20-Apr-99	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		13-Jul-99	0.0072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		11-Oct-99	0.0096	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		18-Jan-00	0.0066	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		27-Apr-00	0.0053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		25-Jul-00	<0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		10-Oct-00	0.0094	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		17-Jan-01	0.0087	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		09-Apr-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		02-Jul-01	0.0073	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		12-Oct-01	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		12-Oct-01	0.0078	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		09-Jan-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		09-Jan-02	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		08-Apr-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		08-Jul-02	0.0089 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		07-Oct-02	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		14-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		15-Apr-03	0.0068	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		08-Jul-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		27-Oct-03	0.0085	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		19-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		03-May-04	0.0069	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		12-Jul-04	0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		13-Oct-04	0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		13-Oct-04	0.0069	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		19-Jan-05	0.0082	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		19-Apr-05	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
RP-5		18-Jul-05	0.0083	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		24-Oct-05	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		23-Jan-06	0.0079	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		18-Apr-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		20-Apr-07	0.0053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		16-Apr-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		14-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		28-Apr-10	0.0063	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		15-Apr-11	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		21-Jul-11	<0.0071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		12-Oct-11	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		23-Feb-12	0.0098	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		17-Apr-12	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		23-Oct-12	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		19-Apr-13	0.0069	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		08-Oct-13	0.0065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		29-Apr-14	0.0067	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-5		30-Oct-14	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		11-Oct-99	0.0099	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		20-Jan-00	0.0067	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		28-Apr-00	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		25-Jul-00	0.018 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		10-Oct-00	0.0088	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		16-Nov-00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.12
RP-BW-02		18-Jan-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02
DUP		18-Jan-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		10-Jan-02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		10-Jan-02	0.0065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		15-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		20-Jan-04	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
RP-BW-02		15-Jul-04	0.0057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		19-Jan-05	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		25-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		17-Apr-07	0.054	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		17-Apr-08	0.0096	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		15-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RP-BW-02		30-Apr-10	0.0087	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		14-Oct-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		13-Jan-00	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		27-Apr-00	0.0088	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		24-Jul-00	<0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		11-Oct-00	0.0062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		25-Jan-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		09-Jan-02	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		17-Jan-03	0.0058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		21-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		20-Jan-05	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		24-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		19-Apr-07	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		16-Apr-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		16-Apr-08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		16-Apr-08	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		15-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-01		27-Apr-10	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-02		25-Jan-01	0.0076	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-02		10-Apr-01	0.0061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-02		06-Jul-01	<0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-02		15-Oct-01	0.0099	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-02		09-Jan-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-02		17-Jan-03	0.0076	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
SA-AW-02		22-Jan-04	0.0072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-02		20-Jan-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-02		25-Jan-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-03		12-Oct-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02
SA-AW-03		19-Jan-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-03		27-Apr-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-03		24-Jul-00	< 0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-03		11-Oct-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-03		18-Jan-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.071
SA-AW-03		09-Jan-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-03		17-Jan-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-03		21-Jan-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-03		21-Jan-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-03		25-Jan-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-04		14-Oct-99	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-04		19-Jan-00	0.017 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Jan-00	< 0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-04		27-Apr-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		27-Apr-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-04		24-Jul-00	< 0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		24-Jul-00	< 0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-04		11-Oct-00	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-04		25-Jan-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-04		09-Jan-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-04		17-Jan-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-04		21-Jan-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-04		18-Jan-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-04		18-Jan-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		18-Jan-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-04		25-Jan-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
SA-AW-04		20-Apr-07	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-05		14-Oct-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		14-Oct-99	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-05		19-Jan-00	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-05		27-Apr-00	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-05		24-Jul-00	<0.005 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-05		11-Oct-00	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		11-Oct-00	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-05		18-Jan-01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02
SA-AW-05		09-Jan-02	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-05		17-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		17-Jan-03	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-05		21-Jan-04	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-05		18-Jan-05	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-05		25-Jan-06	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-AW-05		17-Apr-09	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		14-Oct-99	0.034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		13-Jan-00	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		27-Apr-00	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		24-Jul-00	0.032 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		11-Oct-00	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		11-Oct-00	0.044	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		16-Nov-00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.036
SA-BW-01		22-Jan-01	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02
SA-BW-01		10-Jan-02	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		17-Jan-03	0.034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		21-Jan-04	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		20-Jan-05	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		24-Jan-06	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		29-Aug-06	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
SA-BW-01		19-Apr-07	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		17-Oct-07	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		16-Apr-08	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		08-Oct-08	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		08-Oct-08	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		15-Apr-09	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		26-Oct-09	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		26-Apr-10	0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SA-BW-01		19-Oct-10	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		19-Oct-10	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AH-21		03-Nov-00	< 0.005	0.059	< 0.002	< 0.005	< 0.003	< 0.01	NA	< 0.005	< 0.005	< 0.01	< 0.02
SP-AH-21		03-Nov-00	NA	NA	NA	NA	NA	NA	< 0.0002	NA	NA	NA	NA
SP-AH-21		16-Nov-00	< 0.005	0.062	< 0.002	< 0.005	< 0.003	< 0.01	NA	< 0.005	< 0.005	< 0.01	< 0.02
SP-AH-21		16-Nov-00	NA	NA	NA	NA	NA	NA	< 0.0002	NA	NA	NA	NA
DUP		16-Nov-00	< 0.005	0.058	< 0.002	< 0.005	< 0.003	< 0.01	NA	< 0.005	< 0.005	< 0.01	< 0.02
DUP		16-Nov-00	NA	NA	NA	NA	NA	NA	< 0.0002	NA	NA	NA	NA
SP-AW-06		18-Jan-01	0.0052	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02
SP-AW-06		09-Apr-01	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		06-Jul-01	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		15-Oct-01	0.0072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		08-Jan-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		08-Jan-02	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		03-Apr-02	0.0052	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		17-Jan-03	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		20-Jan-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		04-May-04	0.0052	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		04-May-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		15-Jul-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		14-Oct-04	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		18-Jan-05	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc
SP-AW-06		19-Apr-05	0.0071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		21-Jul-05	0.0098	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		25-Jan-06	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		20-Apr-07	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		18-Apr-08	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		18-Apr-08	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		14-Apr-09	< 0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-AW-06		29-Apr-10	0.0017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP		29-Apr-10	0.0011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All notes are listed at the end of this table - see last page.

Table D-4
Summary of Historical Inorganic Compounds in Groundwater Monitoring Wells
The Sherwin-Williams Company
Emeryville, California
Concentrations reported in milligrams per liter (mg/L)

Well Number	Notes	Date Sampled	Arsenic	Barium	Beryllium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver	Vanadium	Zinc

Data QA/QC performed by EW.

Notes:

Samples were analyzed using EPA Method 200/6000/7000 series for selected metals.

< = Analyte was not detected at or greater than the detection limit reported. For some historical samples, detection limit was not available.

na = Not analyzed

DUP = Duplicate sample (field duplicate)

(a) Concentrations for LF-B1 may not represent B-zone water quality because LF-B1 is screened in the aquitard between the A- and B-zones.

(b) Concentrations for LF-B5 may not represent B-zone water quality because LF-B5 is screened in the aquitard between the A- and B-zones.

(c) The samples collected from wells LF-27 and LF-28 may have inadvertently been switched during field or laboratory procedures, as indicated by the concentrations of arsenic in these samples during the first quarter 2004 monitoring event.

(d) Results of split samples taken on behalf of CDM.

* Three groundwater samples were collected from well CDM-1 on 12/8/06 by Camp Dresser McKee, Inc. (CDM). According to CDM, two groundwater samples were collected from approximately 9.8 feet below top of casing (TOC); the samples were analyzed by two different laboratories by different analytical methods; reported dissolved arsenic concentrations were 9.8 and 11.8 mg/l, as analyzed by EPA Methods 6010B and 1637, respectively. The third groundwater sample (*) was collected from approximately 12.2 feet below TOC, was analyzed by EPA Method 1632, and the reported dissolved arsenic concentration was 12.08 mg/l.

MD-1 through MD-4 are wells monitored by SLR consulting, and MD-5 is monitored by EKI personnel.

Data Qualifiers:

J = Concentration or detection limit is estimated.

U = Quantified as nondetect.

U5 = Qualified as nondetect (U) based on field blank contamination evaluation.

J8 = Concentration is estimated because laboratory control spike and/or laboratory control duplicate spike percent recoveries were outside of control limits.

UJ8 = Nondetected value is estimated because laboratory control spike and/or laboratory control duplicate spike percent recoveries were outside of control limits.

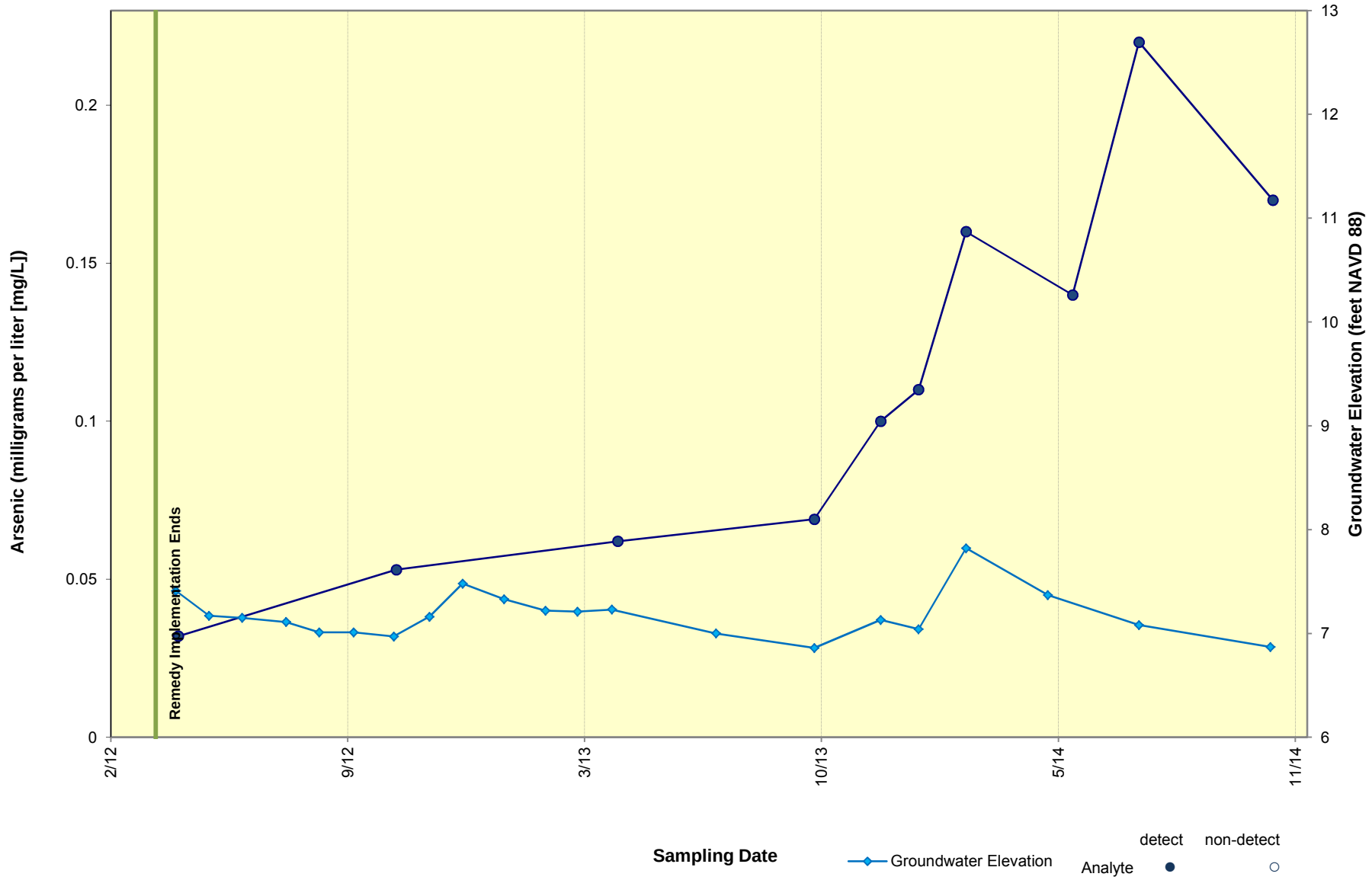
R = Rejected

F = Field Filtered

ARCADIS

Appendix E

Arsenic Concentration Trend Plots for CDM-108

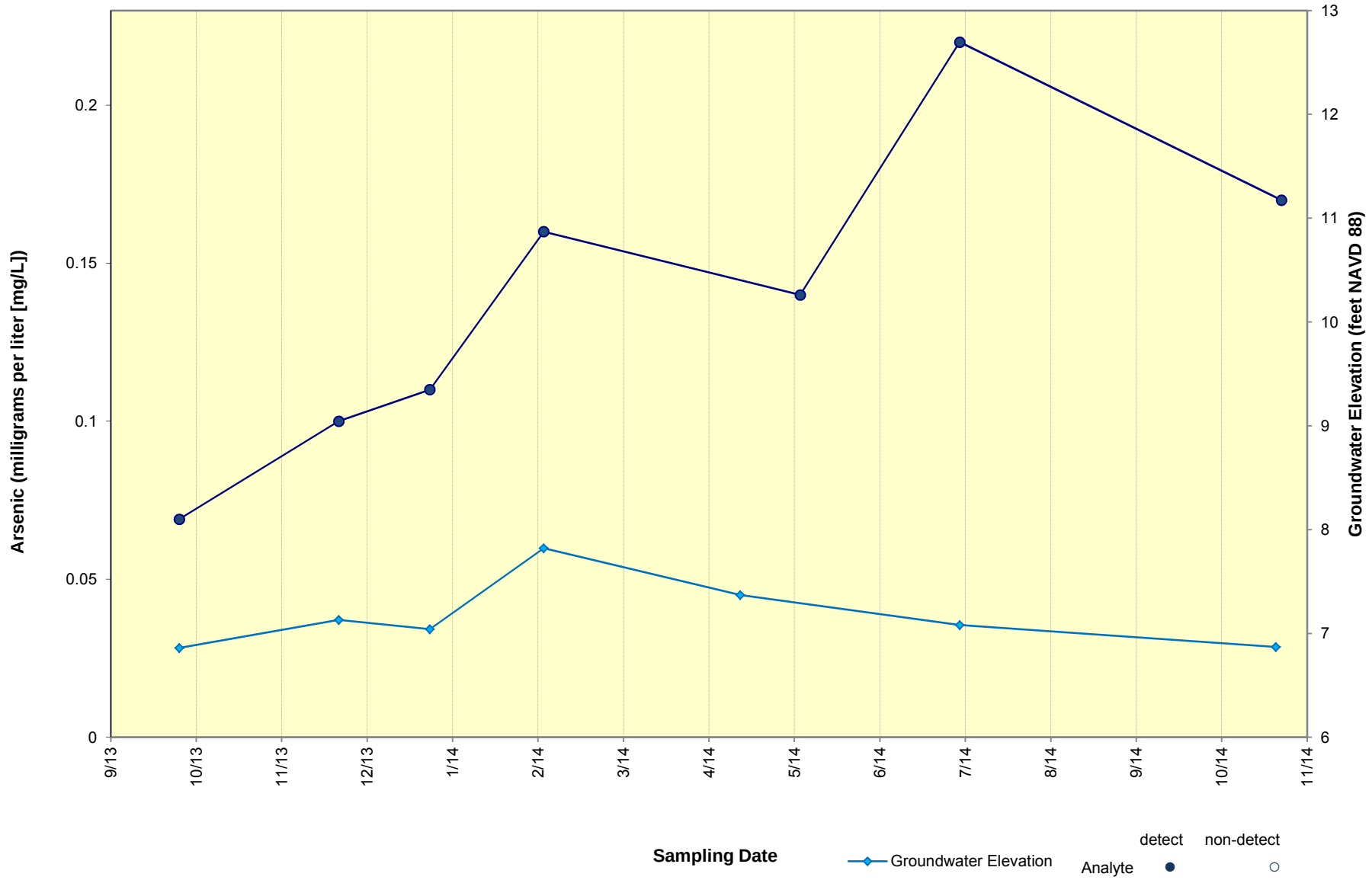


ARCADIS

Concentration and Groundwater Elevation vs. Time Plot – Arsenic in CDM-108

The Sherwin-Williams Company, Emeryville, California

Figure E-1a



ARCADIS

Concentration and Groundwater Elevation vs. Time Plot – Arsenic in CDM-108

The Sherwin-Williams Company, Emeryville, California

Figure E-1b

ARCADIS

Appendix F

Electronic Copies of Groundwater Chain-of-Custody Forms and Analytical Laboratory Reports

Well IDs associated with sampling IDs in analytical laboratory reports are provided in Appendix C.


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 258777
ANALYTICAL REPORT

Arcadis	Project : EM002616.0014.00401
2000 Powell St.	Location : Sherwin Williams-Emeryville
Emeryville, CA 94608	Level : II

Sample ID	Lab ID
971-070814	258777-001
991A-070814	258777-002
991B-070814	258777-003
30-36-108-070814	258777-004
30-36-108-070814-D	258777-005

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 07/21/2014

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**258777**
Client:	**Arcadis**
Project:	**EM002616.0014.00401**
Location:	**Sherwin Williams-Emeryville**
Request Date:	**07/08/14**
Samples Received:	**07/08/14**

This data package contains sample and QC results for five water samples, requested for the above referenced project on 07/08/14. The samples were received cold and intact. All data were e-mailed to Erica Whiting on 07/21/14.

Metals (EPA 6010B):
No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # 258777

Project No: EM002616.0014.00401
Project Name: Sherwin Williams
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Miljan Draganic
Report To: Erica Whiting
Company: ARCADIS
Telephone:
Email: on file

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	Dissolved Arsenic (6010) ⊛
1	971-070814	7-8-14	1200	X				1					X	X
2	991A-070814	↓	1210	X				1					X	X
3	991B-070814		1240	X				1					X	X
4	30-36-108-070814		1250	X				1					X	X
5	30-36-108-070814-D	↓	1255	X				1					X	X

Notes:
⊛ Please filter As sample in Lab, UPON ARRIVAL.

QAPP Project

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 7/8/14 TIME: 1345
DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: 7/8/14 TIME: 13:47
DATE: TIME:
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 258777 Date Received 07/08/14 Number of coolers 1
Client ARCADIS Project EM002616.0014.00404

Date Opened 7/8/14 By (print) MC (sign)
Date Logged in " By (print) " (sign) "

1. Did cooler come with a shipping slip (airbill, etc) ____ YES (NO)
Shipping info ____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many ____ Name ____ Date ____
2B. Were custody seals intact upon arrival? ____ YES NO N/A
3. Were custody papers dry and intact when received? ____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe) ____

☒ Bubble Wrap ☐ Foam blocks ☐ Bags ~~☒ None~~ MC 7/8
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 3.1

☐ Samples received on ice & cold without a temperature blank; temp taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES (NO)
If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ (YES) NO
10. Are there any missing / extra samples? ____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? ____ (YES) NO
12. Are sample labels present, in good condition and complete? ____ ~~YES~~ NO
13. Do the sample labels agree with custody papers? ____ ~~YES~~ NO
14. Was sufficient amount of sample sent for tests requested? ____ ~~YES~~ NO
15. Are the samples appropriately preserved? ____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? ____ YES NO N/A
17. Did you document your preservative check? ____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? ____ YES NO N/A
21. Was the client contacted concerning this sample delivery? ____ YES (NO)
If YES, Who was called? ____ By ____ Date: ____

COMMENTS

____
____
____
____
____
____

Rev 10, 10/11

Curtis & Tompkins, Ltd.

Detections Summary for 258777

Client : Arcadis
Project : EM002616.0014.00401
Location : Sherwin Williams-Emeryville

Client Sample ID : 971-070814 Laboratory Sample ID : 258777-001

No Detections

Client Sample ID : 991A-070814 Laboratory Sample ID : 258777-002

No Detections

Client Sample ID : 991B-070814 Laboratory Sample ID : 258777-003

No Detections

Client Sample ID : 30-36-108-070814 Laboratory Sample ID : 258777-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Arsenic	220		5.0	1.3	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 30-36-108-070814-D Laboratory Sample ID : 258777-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Arsenic	230		5.0	1.3	ug/L	DISS.	1.000	EPA 6010B	METHOD

Curtis & Tompkins, Ltd.

Dissolved Arsenic

Lab #:	258777	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	METHOD
Project#:	EM002616.0014.00401	Analysis:	EPA 6010B
Analyte:	Arsenic	Sampled:	07/08/14
Matrix:	Filtrate	Received:	07/08/14
Units:	ug/L	Prepared:	07/11/14
Diln Fac:	1.000	Analyzed:	07/18/14
Batch#:	213189		

Field ID	Type	Lab ID	Result	RL
971-070814	SAMPLE	258777-001	ND	5.0
991A-070814	SAMPLE	258777-002	ND	5.0
991B-070814	SAMPLE	258777-003	ND	5.0
30-36-108-070814	SAMPLE	258777-004	220	5.0
30-36-108-070814-D	SAMPLE	258777-005	230	5.0
	BLANK	QC748782	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Arsenic

Lab #:	258777	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	METHOD
Project#:	EM002616.0014.00401	Analysis:	EPA 6010B
Analyte:	Arsenic	Batch#:	213189
Field ID:	ZZZZZZZZZZ	Sampled:	07/08/14
MSS Lab ID:	258799-001	Received:	07/08/14
Matrix:	Filtrate	Prepared:	07/11/14
Units:	ug/L	Analyzed:	07/18/14
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC748783		100.0	98.98	99	80-120		
BSD	QC748784		100.0	97.86	98	80-120	1	20
MS	QC748785	<1.293	100.0	114.9	115	79-126		
MSD	QC748786		100.0	109.7	110	79-126	5	20

RPD= Relative Percent Difference


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 262026
ANALYTICAL REPORT

Arcadis	Project : EM002616.0014.00401
2000 Powell St.	Location : Sherwin Williams-Emeryville
Emeryville, CA 94608	Level : II

Sample ID	Lab ID
991A-102714	262026-001
991B-102714	262026-002
50-36-103-102714	262026-003
50-36-103-102714-D	262026-004

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 11/03/2014

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**262026**
Client:	**Arcadis**
Project:	**EM002616.0014.00401**
Location:	**Sherwin Williams-Emeryville**
Request Date:	**10/27/14**
Samples Received:	**10/27/14**

This data package contains sample and QC results for four water samples, requested for the above referenced project on 10/27/14. The samples were received cold and intact. All data were e-mailed to Erica Whiting on 11/03/14.

Metals (EPA 6010B):
No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # 262026

Project No: EM002616.0014.00401
Project Name: Sherwin Williams
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Miljan D. & Miguel G.
Report To: Erica Whiting
Company: ARCADIS
Telephone:
Email: on file

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	Dissolved Arsenic (6010) ⊛
	991A-102714	10/27/14	1345	X				1					X	X
	991B-102714	↓	1350	X				1					X	X
	50-36-103-102714		1650	X				1					X	X
	50-36-103-102714-D	↓	1655	X				1					X	X

Notes:
⊛ Lab to Filter upon arrival.
- QAPP Project

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 10/27/14 TIME: 1720
DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: 10/27/14 TIME: 17:20
DATE: TIME:
DATE: TIME:

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 262026 Date Received 10/27/14 Number of coolers 1
Client Arcadis Project EM002616.0014.00401

Date Opened 10/27 By (print) ME (sign)
Date Logged in 1 By (print) 1 (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.3

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? YES NO (N/A)
17. Did you document your preservative check? YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? YES NO (N/A)
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 262026

Results for any subcontracted analyses are not included in this summary.

Client : Arcadis
Project : EM002616.0014.00401
Location : Sherwin Williams-Emeryville

Client Sample ID : 991A-102714 Laboratory Sample ID : 262026-001

No Detections

Client Sample ID : 991B-102714 Laboratory Sample ID : 262026-002

No Detections

Client Sample ID : 50-36-103-102714 Laboratory Sample ID : 262026-003

No Detections

Client Sample ID : 50-36-103-102714-D Laboratory Sample ID : 262026-004

No Detections

Curtis & Tompkins, Ltd.

Dissolved Arsenic

Lab #:	262026	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	METHOD
Project#:	EM002616.0014.00401	Analysis:	EPA 6010B
Analyte:	Arsenic	Sampled:	10/27/14
Matrix:	Filtrate	Received:	10/27/14
Units:	ug/L	Prepared:	10/29/14
Diln Fac:	1.000	Analyzed:	10/30/14
Batch#:	216916		

Field ID	Type	Lab ID	Result	RL
991A-102714	SAMPLE	262026-001	ND	5.0
991B-102714	SAMPLE	262026-002	ND	5.0
50-36-103-102714	SAMPLE	262026-003	ND	5.0
50-36-103-102714-D	SAMPLE	262026-004	ND	5.0
	BLANK	QC763599	ND	5.0
	BLANK	QC763600	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Arsenic

Lab #:	262026	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	METHOD
Project#:	EM002616.0014.00401	Analysis:	EPA 6010B
Analyte:	Arsenic	Batch#:	216916
Field ID:	ZZZZZZZZZZ	Sampled:	10/27/14
MSS Lab ID:	262037-001	Received:	10/28/14
Matrix:	Filtrate	Prepared:	10/29/14
Units:	ug/L	Analyzed:	10/30/14
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC763601		100.0	94.79	95	80-120		
BSD	QC763602		100.0	101.5	101	80-120	7	20
MS	QC763603	1.385	100.0	109.6	108	79-126		
MSD	QC763604		100.0	106.8	105	79-126	3	20

RPD= Relative Percent Difference


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 262055
ANALYTICAL REPORT

Arcadis	Project : EM002616.0014.00401
2000 Powell St.	Location : Sherwin Williams-Emeryville
Emeryville, CA 94608	Level : II

Sample ID	Lab ID
991A-102814	262055-001
991B-102814	262055-002
40-36-040-102814	262055-003
40-36-041-102814	262055-004
40-36-003-102814	262055-005
40-36-037-102814	262055-006
50-36-106-102814	262055-007
50-36-105-102814	262055-008
40-36-041-102814-D	262055-009

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 11/05/2014

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**262055**
Client:	**Arcadis**
Project:	**EM002616.0014.00401**
Location:	**Sherwin Williams-Emeryville**
Request Date:	**10/28/14**
Samples Received:	**10/28/14**

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 10/28/14. The samples were received cold and intact. All data were e-mailed to Erica Whiting on 11/05/14.

Metals (EPA 6010B):
No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # 202055

Project No: EM002616.0014.00401
Project Name: Sherwin Williams
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Miljan D. & Miguel G.
Report To: Erica Whiting
Company: ARCADIS
Telephone:
Email: on file

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	Dissolved Arsenic (6010) ⊛
1	991A-102814	10-28-14	0900	X				1					X	X
2	991B-102814		0905	X				1					X	X
3	40-36-040-102814		0950	X				1					X	X
4	40-36-041-102814		1040	X				1					X	X
5	40-36-003-102814		1310	X				1					X	X
6	40-36-037-102814		1405	X				1					X	X
7	50-36-106-102814		1505	X				1					X	X
8	50-36-105-102814		1600	X				1					X	X
9	40-36-041-102814-D	↓	1045	X				1					X	X

Notes:
⊛ Lab to filter upon arrival.

QAPP Project

SAMPLE RECEIPT
☑ Intact
☑ Cold
☑ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 10/28/14 TIME: 1700
DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: 10/28/14 TIME: 1705
DATE: TIME:
DATE: TIME:

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 462055 Date Received 10/28/14 Number of coolers 1
Client ARCADIS Project EM002616.0014.00401

Date Opened 10/28 By (print) A (sign)
Date Logged in " " By (print) " " (sign) "

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C
Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.0°
☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun
☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? YES NO (N/A)
17. Did you document your preservative check? YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? YES NO (N/A)
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 262055

Results for any subcontracted analyses are not included in this summary.

Client : Arcadis
Project : EM002616.0014.00401
Location : Sherwin Williams-Emeryville

Client Sample ID : 991A-102814 Laboratory Sample ID : 262055-001

No Detections

Client Sample ID : 991B-102814 Laboratory Sample ID : 262055-002

No Detections

Client Sample ID : 40-36-040-102814 Laboratory Sample ID : 262055-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	9.3		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 40-36-041-102814 Laboratory Sample ID : 262055-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	69		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 40-36-003-102814 Laboratory Sample ID : 262055-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	5.7		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 40-36-037-102814 Laboratory Sample ID : 262055-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	6.9		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 50-36-106-102814 Laboratory Sample ID : 262055-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	1,800		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 50-36-105-102814 Laboratory Sample ID : 262055-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	60		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : 40-36-041-102814-D Laboratory Sample ID : 262055-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	69		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Curtis & Tompkins, Ltd.

Dissolved Arsenic

Lab #:	262055	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	METHOD
Project#:	EM002616.0014.00401	Analysis:	EPA 6010B
Analyte:	Arsenic	Batch#:	216960
Matrix:	Filtrate	Sampled:	10/28/14
Units:	ug/L	Received:	10/28/14
Diln Fac:	1.000	Prepared:	10/30/14

Field ID	Type	Lab ID	Result	RL	Analyzed
991A-102814	SAMPLE	262055-001	ND	5.0	11/03/14
991B-102814	SAMPLE	262055-002	ND	5.0	11/03/14
40-36-040-102814	SAMPLE	262055-003	9.3	5.0	11/03/14
40-36-041-102814	SAMPLE	262055-004	69	5.0	11/03/14
40-36-003-102814	SAMPLE	262055-005	5.7	5.0	11/03/14
40-36-037-102814	SAMPLE	262055-006	6.9	5.0	11/03/14
50-36-106-102814	SAMPLE	262055-007	1,800	5.0	11/03/14
50-36-105-102814	SAMPLE	262055-008	60	5.0	11/03/14
40-36-041-102814-D	SAMPLE	262055-009	69	5.0	11/03/14
	BLANK	QC763768	ND	5.0	11/02/14

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Arsenic

Lab #:	262055	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	METHOD
Project#:	EM002616.0014.00401	Analysis:	EPA 6010B
Analyte:	Arsenic	Diln Fac:	1.000
Field ID:	991A-102814	Batch#:	216960
MSS Lab ID:	262055-001	Sampled:	10/28/14
Matrix:	Filtrate	Received:	10/28/14
Units:	ug/L	Prepared:	10/30/14

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC763769		100.0	89.40	89	80-120			11/02/14
BSD	QC763770		100.0	91.85	92	80-120	3	20	11/02/14
MS	QC763771	<1.028	100.0	103.7	104	79-126			11/03/14
MSD	QC763772		100.0	109.4	109	79-126	5	20	11/03/14

RPD= Relative Percent Difference


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 262086
ANALYTICAL REPORT

Arcadis	Project : EM002616.0014.00401
2000 Powell St.	Location : Sherwin Williams-Emeryville
Emeryville, CA 94608	Level : II

Sample ID	Lab ID
971-102914	262086-001
981-102914	262086-002
991A-102914	262086-003
991B-102914	262086-004
40-36-102-102914	262086-005
40-36-101-102914	262086-006
40-36-101-102914-D	262086-007
30-36-108-102914	262086-008
30-36-107-102914	262086-009

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 11/14/2014

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**262086**
Client:	**Arcadis**
Project:	**EM002616.0014.00401**
Location:	**Sherwin Williams-Emeryville**
Request Date:	**10/29/14**
Samples Received:	**10/29/14**

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 10/29/14. The samples were received cold and intact. All data were e-mailed to Erica Whiting on 11/14/14.

Volatile Organics by GC/MS (EPA 8260B):
Many analytes were detected between the MDL and the RL in the method blank for batch 217173; these analytes were not detected in samples at or above the RL. No other analytical problems were encountered.

Metals (EPA 6010B):
No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # 267086

Project No: EM002616.0014.00401
Project Name: Sherwin Williams
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Miljan D. & Miguel G.
Report To: Erica Whiting
Company: ARCADIS
Telephone: on file
Email:

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST	
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	Dissolved Arsenic (6010) ⊛	VOCs (8260B)
1	971-102914	10-29-14	0820	X				4	X				X	X	X
2	981-102914		0800	X				3	X						X
3	991A-102914		0830	X				4	X				X	X	X
4	991B-102914		0845	X				4	X				X	X	X
5	40-36-102-102914		1030	X				4	X				X	X	X
6	40-36-101-102914		1120	X				4	X				X	X	X
7	40-36-101-102914-D		1125	X				4	X				X	X	X
8	30-36-108-102914		1410	X				4	X				X	X	X
9	30-36-107-102914	↓	1605	X				4	X				X	X	X

Notes:
⊛Lab to Filter Arsenic samples upon arrival

@APP Project

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 10/29/14 TIME: 1700
DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: 10/29/14 TIME: 1700
DATE: TIME:
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 262086 Date Received 10/29/14 Number of coolers 1
Client ARCADIS Project EM002616.0004.00401

Date Opened 10/29 By (print) MC (sign)
Date Logged in 1 By (print) (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☒ Bubble Wrap ☒ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 2 1

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? YES NO (N/A)
17. Did you document your preservative check? YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 262086

Results for any subcontracted analyses are not included in this summary.

Client : Arcadis
Project : EM002616.0014.00401
Location : Sherwin Williams-Emeryville

Client Sample ID : 971-102914 Laboratory Sample ID : 262086-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acetone	15		10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	0.3	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
2-Hexanone	0.4	J	10	0.2	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 981-102914 Laboratory Sample ID : 262086-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acetone	1.1	J	10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 991A-102914 Laboratory Sample ID : 262086-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acetone	21		10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	0.3	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
2-Hexanone	0.7	J	10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 991B-102914 Laboratory Sample ID : 262086-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acetone	20		10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	0.3	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
2-Hexanone	0.6	J	10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : 40-36-102-102914 Laboratory Sample ID : 262086-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acetone	0.6	J	10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	0.5	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1-Dichloroethane	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	1.6		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichloroethane	1.1		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Arsenic	7.6		5.0		ug/L	DISS.	1.000	EPA 6010B	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : 40-36-101-102914 Laboratory Sample ID : 262086-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acetone	0.8	J	10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	0.8		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	0.7		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichloroethane	0.8		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Arsenic	49		5.0		ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 40-36-101-102914-D Laboratory Sample ID : 262086-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acetone	0.9	J	10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	0.8		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	0.7		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichloroethane	0.8		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Arsenic	50		5.0		ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 30-36-108-102914 Laboratory Sample ID : 262086-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
MTBE	0.3	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	0.3	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichloroethane	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chlorobenzene	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
tert-Butylbenzene	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Arsenic	170		5.0		ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 30-36-107-102914 Laboratory Sample ID : 262086-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
MTBE	0.5	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chlorobenzene	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Arsenic	9.8		5.0		ug/L	DISS.	1.000	EPA 6010B	METHOD

J = Estimated value

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	971-102914	Batch#:	217371
Lab ID:	262086-001	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/12/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	15	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.2
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	0.3 J	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	0.4 J	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.2
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	971-102914	Batch#:	217371
Lab ID:	262086-001	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/12/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	ND	2.0	0.2
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	96	77-136
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	97	80-120

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	981-102914	Batch#:	217371
Lab ID:	262086-002	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/12/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	1.1 J	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.2
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.2
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	981-102914	Batch#:	217371
Lab ID:	262086-002	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/12/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	ND	2.0	0.2
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	95	77-136
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	96	80-120

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	991A-102914	Batch#:	217173
Lab ID:	262086-003	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	21	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.4
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.0
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	0.1 J	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.5
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	0.3 J	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	0.7 J	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	991A-102914	Batch#:	217173
Lab ID:	262086-003	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.5
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.4
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	102	77-136
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-120

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	991B-102914	Batch#:	217173
Lab ID:	262086-004	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	20	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.4
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.0
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	0.1 J	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.5
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	0.3 J	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	0.6 J	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	991B-102914	Batch#:	217173
Lab ID:	262086-004	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.5
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.4
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	105	80-120

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	40-36-102-102914	Batch#:	217173
Lab ID:	262086-005	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	0.6 J	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.4
Carbon Disulfide	ND	0.5	0.1
MTBE	0.5 J	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.0
1,1-Dichloroethane	0.2 J	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	1.6	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	1.1	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.5
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	40-36-102-102914	Batch#:	217173
Lab ID:	262086-005	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.5
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.4
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	104	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-120

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	40-36-101-102914	Batch#:	217173
Lab ID:	262086-006	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	0.8 J	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.4
Carbon Disulfide	ND	0.5	0.1
MTBE	0.8	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.0
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	0.7	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	0.8	0.5	0.1
Benzene	0.2 J	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.5
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	40-36-101-102914	Batch#:	217173
Lab ID:	262086-006	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.5
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.4
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	106	77-136
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-120

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	40-36-101-102914-D	Batch#:	217173
Lab ID:	262086-007	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	0.9 J	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.4
Carbon Disulfide	ND	0.5	0.1
MTBE	0.8	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.0
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	0.7	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	0.8	0.5	0.1
Benzene	0.2 J	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.5
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	40-36-101-102914-D	Batch#:	217173
Lab ID:	262086-007	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.5
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.4
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	105	77-136
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-120

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	30-36-108-102914	Batch#:	217173
Lab ID:	262086-008	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.4
Carbon Disulfide	ND	0.5	0.1
MTBE	0.3 J	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.0
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	0.3 J	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	0.2 J	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.5
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	0.2 J	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	30-36-108-102914	Batch#:	217173
Lab ID:	262086-008	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	0.2 J	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.5
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.4
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	104	77-136
1,2-Dichloroethane-d4	105	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	105	80-120

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	30-36-107-102914	Batch#:	217173
Lab ID:	262086-009	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/07/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.4
Carbon Disulfide	ND	0.5	0.1
MTBE	0.5 J	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.0
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.5
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	0.1 J	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	30-36-107-102914	Batch#:	217173
Lab ID:	262086-009	Sampled:	10/29/14
Matrix:	Water	Received:	10/29/14
Units:	ug/L	Analyzed:	11/07/14
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.5
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.4
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	105	77-136
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	107	80-120

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	217173
Units:	ug/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Type: BS Lab ID: QC764602

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	13.45	108	65-134
Benzene	12.50	13.20	106	80-124
Trichloroethene	12.50	12.75	102	80-120
Toluene	12.50	13.07	105	80-122
Chlorobenzene	12.50	13.25	106	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	77-136
1,2-Dichloroethane-d4	86	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	101	80-120

Type: BSD Lab ID: QC764603

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	12.24	98	65-134	9	20
Benzene	12.50	12.91	103	80-124	2	20
Trichloroethene	12.50	12.38	99	80-120	3	20
Toluene	12.50	12.74	102	80-122	3	20
Chlorobenzene	12.50	12.82	103	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	77-136
1,2-Dichloroethane-d4	86	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	100	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Type:	BLANK	Dil'n Fac:	1.000
Lab ID:	QC764680	Batch#:	217173
Matrix:	Water	Analyzed:	11/06/14
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.4
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.0
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.5
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	0.1 J	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC764680	Batch#:	217173
Matrix:	Water	Analyzed:	11/06/14
Units:	ug/L		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	0.1 J	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	0.1 J	0.5	0.1
n-Butylbenzene	0.2 J	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.5
1,2,4-Trichlorobenzene	0.2 J	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.4
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	0.1 J	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-136
1,2-Dichloroethane-d4	91	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	103	80-120

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	217371
Units:	ug/L	Analyzed:	11/12/14
Diln Fac:	1.000		

Type: BS Lab ID: QC765399

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	11.82	95	65-134
Benzene	12.50	11.59	93	80-124
Trichloroethene	12.50	12.26	98	80-120
Toluene	12.50	12.05	96	80-122
Chlorobenzene	12.50	12.52	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	77-136
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	94	80-120

Type: BSD Lab ID: QC765400

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	12.90	103	65-134	9	20
Benzene	12.50	12.09	97	80-124	4	20
Trichloroethene	12.50	13.08	105	80-120	6	20
Toluene	12.50	12.43	99	80-122	3	20
Chlorobenzene	12.50	12.92	103	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	94	77-136
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	94	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Type:	BLANK	Dil'n Fac:	1.000
Lab ID:	QC765401	Batch#:	217371
Matrix:	Water	Analyzed:	11/12/14
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.2
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.2
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC765401	Batch#:	217371
Matrix:	Water	Analyzed:	11/12/14
Units:	ug/L		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	ND	2.0	0.2
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	96	77-136
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	EPA 5030B
Project#:	EM002616.0014.00401	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	217371
MSS Lab ID:	262294-009	Sampled:	11/03/14
Matrix:	Water	Received:	11/05/14
Units:	ug/L	Analyzed:	11/12/14
Diln Fac:	1.000		

Type: MS Lab ID: QC765547

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1268	25.00	23.56	94	69-129
Benzene	<0.1000	25.00	22.92	92	80-127
Trichloroethene	<0.1000	25.00	24.33	97	70-127
Toluene	<0.1000	25.00	23.65	95	80-123
Chlorobenzene	<0.1000	25.00	24.58	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	77-136
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	93	80-120

Type: MSD Lab ID: QC765548

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	24.91	100	69-129	6	26
Benzene	25.00	23.62	94	80-127	3	23
Trichloroethene	25.00	25.29	101	70-127	4	21
Toluene	25.00	24.38	98	80-123	3	22
Chlorobenzene	25.00	25.28	101	80-120	3	22

Surrogate	%REC	Limits
Dibromofluoromethane	95	77-136
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	93	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Arsenic

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	METHOD
Project#:	EM002616.0014.00401	Analysis:	EPA 6010B
Analyte:	Arsenic	Sampled:	10/29/14
Matrix:	Filtrate	Received:	10/29/14
Units:	ug/L	Prepared:	11/03/14
Diln Fac:	1.000	Analyzed:	11/04/14
Batch#:	217070		

Field ID	Type	Lab ID	Result	RL
971-102914	SAMPLE	262086-001	ND	5.0
991A-102914	SAMPLE	262086-003	ND	5.0
991B-102914	SAMPLE	262086-004	ND	5.0
40-36-102-102914	SAMPLE	262086-005	7.6	5.0
40-36-101-102914	SAMPLE	262086-006	49	5.0
40-36-101-102914-D	SAMPLE	262086-007	50	5.0
30-36-108-102914	SAMPLE	262086-008	170	5.0
30-36-107-102914	SAMPLE	262086-009	9.8	5.0
	BLANK	QC764189	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Arsenic

Lab #:	262086	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	METHOD
Project#:	EM002616.0014.00401	Analysis:	EPA 6010B
Analyte:	Arsenic	Batch#:	217070
Field ID:	40-36-102-102914	Sampled:	10/29/14
MSS Lab ID:	262086-005	Received:	10/29/14
Matrix:	Filtrate	Prepared:	11/03/14
Units:	ug/L	Analyzed:	11/04/14
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC764190		100.0	95.16	95	80-120		
BSD	QC764191		100.0	97.16	97	80-120	2	20
MS	QC764192	7.608	100.0	112.2	105	79-126		
MSD	QC764193		100.0	111.1	104	79-126	1	20

RPD= Relative Percent Difference


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 262116
ANALYTICAL REPORT

Arcadis	Project : EM002616.0014.00401
2000 Powell St.	Location : Sherwin Williams
Emeryville, CA 94608	Level : II

Sample ID	Lab ID
991A-103014	262116-001
991B-103014	262116-002
50-36-104-103014	262116-003
40-36-042-103014	262116-004
40-36-042-103014-D	262116-005
30-36-109-103014	262116-006
40-36-005R-103014	262116-007
10-36-003-103014	262116-008
40-36-002-103014	262116-009
40-36-004R-103014	262116-010

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 11/06/2014

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**262116**
Client:	**Arcadis**
Project:	**EM002616.0014.00401**
Location:	**Sherwin Williams**
Request Date:	**10/30/14**
Samples Received:	**10/30/14**

This data package contains sample and QC results for ten water samples, requested for the above referenced project on 10/30/14. The samples were received cold and intact. All data were e-mailed to Erica Whiting on 11/06/14.

Metals (EPA 6010B):
No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 202116

Chain of Custody # _____

Project No: EM002616.0014.00401
Project Name: Sherwin Williams
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH ☒ Standard

Sampler: Miljan D. & Miguel G.
Report To: Erica Whiting
Company: ARCADIS
Telephone:
Email: on file

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	Dissolved Arsenic (6010) ⊛
1	991A-103014	10-30-14	0825	X				1					X	X
2	991B-103014		0830	X				1					X	X
3	50-36-104-103014		0935	X				1					X	X
4	40-36-042-103014		1025	X				1					X	X
5	40-36-042-103014-D		1030	X				1					X	X
6	30-36-109-103014		1130	X				1					X	X
7	40-36-005R-103014		1305	X				1					X	X
8	10-36-003-103014		1345	X				1					X	X
9	40-36-002-103014		1440	X				1					X	X
10	40-36-004R-103014		1525	X				1					X	X

Notes:
⊛ Lab to filter arsenic samples upon arrival.

@APP Project

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 10/30/14 TIME: 1635
DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: 10/30/14 TIME: 1635
DATE: TIME:
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 262116 Date Received 10/30/14 Number of coolers 1
Client CH2MHILL Project EM002616.0014.00401

Date Opened 10/30 By (print) FJ (sign) FJ
Date Logged in 10/30 By (print) FJ (sign) FJ

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.0°

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 262116

Results for any subcontracted analyses are not included in this summary.

Client : Arcadis
Project : EM002616.0014.00401
Location : Sherwin Williams

Client Sample ID : 991A-103014 Laboratory Sample ID : 262116-001

No Detections

Client Sample ID : 991B-103014 Laboratory Sample ID : 262116-002

No Detections

Client Sample ID : 50-36-104-103014 Laboratory Sample ID : 262116-003

No Detections

Client Sample ID : 40-36-042-103014 Laboratory Sample ID : 262116-004

No Detections

Client Sample ID : 40-36-042-103014-D Laboratory Sample ID : 262116-005

No Detections

Client Sample ID : 30-36-109-103014 Laboratory Sample ID : 262116-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	250		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 40-36-005R-103014 Laboratory Sample ID : 262116-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	12		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 10-36-003-103014 Laboratory Sample ID : 262116-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	74		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 40-36-002-103014 Laboratory Sample ID : 262116-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	45		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 40-36-004R-103014 Laboratory Sample ID : 262116-010

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	6.1		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Curtis & Tompkins, Ltd.

Dissolved Arsenic

Lab #:	262116	Location:	Sherwin Williams
Client:	Arcadis	Prep:	METHOD
Project#:	EM002616.0014.00401	Analysis:	EPA 6010B
Analyte:	Arsenic	Sampled:	10/30/14
Matrix:	Filtrate	Received:	10/30/14
Units:	ug/L	Prepared:	11/03/14
Diln Fac:	1.000	Analyzed:	11/04/14
Batch#:	217070		

Field ID	Type	Lab ID	Result	RL
991A-103014	SAMPLE	262116-001	ND	5.0
991B-103014	SAMPLE	262116-002	ND	5.0
50-36-104-103014	SAMPLE	262116-003	ND	5.0
40-36-042-103014	SAMPLE	262116-004	ND	5.0
40-36-042-103014-D	SAMPLE	262116-005	ND	5.0
30-36-109-103014	SAMPLE	262116-006	250	5.0
40-36-005R-103014	SAMPLE	262116-007	12	5.0
10-36-003-103014	SAMPLE	262116-008	74	5.0
40-36-002-103014	SAMPLE	262116-009	45	5.0
40-36-004R-103014	SAMPLE	262116-010	6.1	5.0
	BLANK	QC764189	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Arsenic

Lab #:	262116	Location:	Sherwin Williams
Client:	Arcadis	Prep:	METHOD
Project#:	EM002616.0014.00401	Analysis:	EPA 6010B
Analyte:	Arsenic	Batch#:	217070
Field ID:	40-36-102-102914	Sampled:	10/29/14
MSS Lab ID:	262086-005	Received:	10/29/14
Matrix:	Filtrate	Prepared:	11/03/14
Units:	ug/L	Analyzed:	11/04/14
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC764190		100.0	95.16	95	80-120		
BSD	QC764191		100.0	97.16	97	80-120	2	20
MS	QC764192	7.608	100.0	112.2	105	79-126		
MSD	QC764193		100.0	111.1	104	79-126	1	20

RPD= Relative Percent Difference


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 262133
ANALYTICAL REPORT

Arcadis	Project : EM002616.0014.00401
2000 Powell St.	Location : Sherwin Williams-Emeryville
Emeryville, CA 94608	Level : II

Sample ID	Lab ID
991A-103114	262133-001
991B-103114	262133-002
40-36-036-103114	262133-003
40-36-036-103114-D	262133-004
40-36-001-103114	262133-005

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 11/07/2014

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**262133**
Client:	**Arcadis**
Project:	**EM002616.0014.00401**
Location:	**Sherwin Williams-Emeryville**
Request Date:	**10/31/14**
Samples Received:	**10/31/14**

This data package contains sample and QC results for five water samples, requested for the above referenced project on 10/31/14. The samples were received cold and intact. All data were e-mailed to Erica Whiting on 11/07/14.

Metals (EPA 6010B):
No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 262133

Chain of Custody # _____

Project No: EM002616.0014.00401
Project Name: Sherwin Williams
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH ☒ Standard

Sampler: Miljan D. & Miguel G.
Report To: Erica Whiting
Company: ARCADIS
Telephone:
Email: on file

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	Dissolved Arsenic (6010) ⊛
	991A-103114	10-31-14	0820	X				1					X	X
	991B-103114		0825	X				1					X	X
	40-36-036-103114		0845	X				1					X	X
	40-36-036-103114-D		0845	X				1					X	X
	40-36-001-103114	↓	1010	X				1					X	X

Notes:
⊛ Lab to filter arsenic samples upon arrival.
QAPP Project

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 10/31/14 TIME: 1135
DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: 10/31/14 TIME: 1135
DATE: TIME:
DATE: TIME:

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 262133 Date Received 10/31/14 Number of coolers 1
Client Arcadis Project EM002616.0014.00401

Date Opened 10/31 By (print) MC (sign) [signature]
Date Logged in 1 By (print) 1 (sign) 1

1. Did cooler come with a shipping slip (airbill, etc) ____ YES (NO)
Shipping info ____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many ____ Name ____ Date ____
2B. Were custody seals intact upon arrival? ____ YES NO (N/A)
3. Were custody papers dry and intact when received? ____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) ____

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.7

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES (NO)
If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ (YES) NO
10. Are there any missing / extra samples? ____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? ____ (YES) NO
12. Are sample labels present, in good condition and complete? ____ (YES) NO
13. Do the sample labels agree with custody papers? ____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? ____ (YES) NO
15. Are the samples appropriately preserved? ____ YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? ____ YES NO (N/A)
17. Did you document your preservative check? ____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? ____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? ____ YES (NO)
If YES, Who was called? ____ By ____ Date: ____

COMMENTS

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 262133

Results for any subcontracted analyses are not included in this summary.

Client : Arcadis
Project : EM002616.0014.00401
Location : Sherwin Williams-Emeryville

Client Sample ID : 991A-103114 Laboratory Sample ID : 262133-001

No Detections

Client Sample ID : 991B-103114 Laboratory Sample ID : 262133-002

No Detections

Client Sample ID : 40-36-036-103114 Laboratory Sample ID : 262133-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	39		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 40-36-036-103114-D Laboratory Sample ID : 262133-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	35		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : 40-36-001-103114 Laboratory Sample ID : 262133-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	80		5.0	ug/L	DISS.	1.000	EPA 6010B	METHOD

Curtis & Tompkins, Ltd.

Dissolved Arsenic

Lab #:	262133	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	METHOD
Project#:	EM002616.0014.00401	Analysis:	EPA 6010B
Analyte:	Arsenic	Batch#:	217153
Matrix:	Filtrate	Sampled:	10/31/14
Units:	ug/L	Received:	10/31/14
Diln Fac:	1.000	Prepared:	11/05/14

Field ID	Type	Lab ID	Result	RL	Analyzed
991A-103114	SAMPLE	262133-001	ND	5.0	11/05/14
991B-103114	SAMPLE	262133-002	ND	5.0	11/06/14
40-36-036-103114	SAMPLE	262133-003	39	5.0	11/06/14
40-36-036-103114-D	SAMPLE	262133-004	35	5.0	11/06/14
40-36-001-103114	SAMPLE	262133-005	80	5.0	11/06/14
	BLANK	QC764524	ND	5.0	11/05/14

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Arsenic

Lab #:	262133	Location:	Sherwin Williams-Emeryville
Client:	Arcadis	Prep:	METHOD
Project#:	EM002616.0014.00401	Analysis:	EPA 6010B
Analyte:	Arsenic	Batch#:	217153
Field ID:	ZZZZZZZZZZ	Sampled:	10/29/14
MSS Lab ID:	262122-002	Received:	10/30/14
Matrix:	Filtrate	Prepared:	11/05/14
Units:	ug/L	Analyzed:	11/05/14
Diln Fac:	1.000		

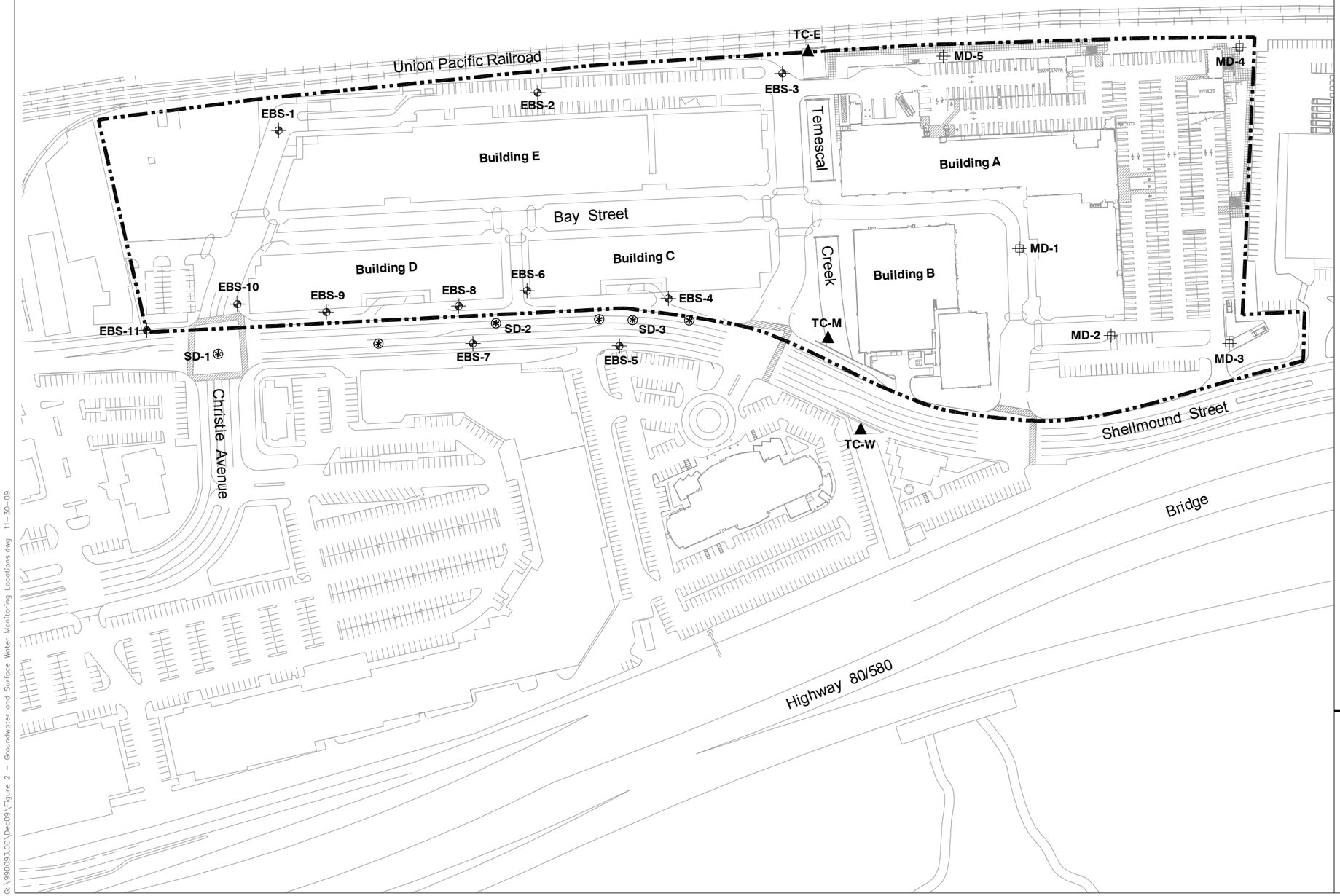
Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC764525		100.0	99.09	99	80-120		
BSD	QC764526		100.0	100.3	100	80-120	1	20
MS	QC764527	46.90	100.0	127.5	81	79-126		
MSD	QC764528		100.0	134.1	87	79-126	5	20

RPD= Relative Percent Difference

ARCADIS

Appendix G

Figure of SBPA Property



N

180 0 180

(Approximate Scale in Feet)

Legend

- Bay Street Project Area
- Groundwater Monitoring Well Shellmound Properties
- Groundwater Monitoring Well Myers Drum Site *(See Note 3)*
- Temescal Creek Surface Water Sampling Point
- Storm Drain Manhole

Notes:

1. All locations are approximate.
2. David L. Hoffman, FAIA "Bay Street Emeryville Block 1 - Building A", dated 6 July 2001.
3. Well nos. MD-1 through MD-4 are monitored by Strategic Engineering and Science on behalf of Industrial Molding and Container Corporation.

Erler & Kalinowski, Inc.

Groundwater and Surface Water Monitoring Locations

Bay Street Project
Emeryville, CA
December 2013
EKI 990093.00

Figure 2

G:\990093.00\Dec09\Figure 2 - Groundwater and Surface Water Monitoring Locations.dwg 11-30-09

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

POLYCHLORINATED BIPHENYLS

Division of Toxicology ToxFAQs™ **February 2001**

This fact sheet answers the most frequently asked health questions (FAQs) about polychlorinated biphenyls. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Polychlorinated biphenyls (PCBs) are a mixture of individual chemicals which are no longer produced in the United States, but are still found in the environment. Health effects that have been associated with exposure to PCBs include acne-like skin conditions in adults and neurobehavioral and immunological changes in children. PCBs are known to cause cancer in animals. PCBs have been found in at least 500 of the 1,598 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What are polychlorinated biphenyls?

Polychlorinated biphenyls are mixtures of up to 209 individual chlorinated compounds (known as congeners). There are no known natural sources of PCBs. PCBs are either oily liquids or solids that are colorless to light yellow. Some PCBs can exist as a vapor in air. PCBs have no known smell or taste. Many commercial PCB mixtures are known in the U.S. by the trade name Aroclor.

PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they don't burn easily and are good insulators. The manufacture of PCBs was stopped in the U.S. in 1977 because of evidence they build up in the environment and can cause harmful health effects. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices containing PCB capacitors, and old microscope and hydraulic oils.

What happens to PCBs when they enter the environment?

❑ PCBs entered the air, water, and soil during their manufacture, use, and disposal; from accidental spills and leaks during their transport; and from leaks or fires in products containing PCBs.

❑ PCBs can still be released to the environment from hazardous waste sites; illegal or improper disposal of industrial wastes and consumer products; leaks from old electrical transformers containing PCBs; and burning of some wastes in incinerators.

❑ PCBs do not readily break down in the environment and thus may remain there for very long periods of time. PCBs can travel long distances in the air and be deposited in areas far away from where they were released. In water, a small amount of PCBs may remain dissolved, but most stick to organic particles and bottom sediments. PCBs also bind strongly to soil.

❑ PCBs are taken up by small organisms and fish in water. They are also taken up by other animals that eat these aquatic animals as food. PCBs accumulate in fish and marine mammals, reaching levels that may be many thousands of times higher than in water.

How might I be exposed to PCBs?

❑ Using old fluorescent lighting fixtures and electrical devices and appliances, such as television sets and refrigerators, that were made 30 or more years ago. These items may leak small amounts of PCBs into the air when they get hot during operation, and could be a source of skin exposure.

❑ Eating contaminated food. The main dietary sources of PCBs are fish (especially sportfish caught in contaminated lakes or rivers), meat, and dairy products.

❑ Breathing air near hazardous waste sites and drinking contaminated well water.

❑ In the workplace during repair and maintenance of PCB transformers; accidents, fires or spills involving transformers, fluorescent lights, and other old electrical devices; and disposal of PCB materials.

How can PCBs affect my health?

The most commonly observed health effects in people exposed to large amounts of PCBs are skin conditions such as acne and rashes. Studies in exposed workers have shown changes in blood and urine that may indicate liver damage. PCB exposures in the general population are not likely to result in skin and liver effects. Most of the studies of health effects of PCBs in the general population examined children of mothers who were exposed to PCBs.

Animals that ate food containing large amounts of PCBs for short periods of time had mild liver damage and some died. Animals that ate smaller amounts of PCBs in food over several weeks or months developed various kinds of health effects, including anemia; acne-like skin conditions; and liver, stomach, and thyroid gland injuries. Other effects

of PCBs in animals include changes in the immune system, behavioral alterations, and impaired reproduction. PCBs are not known to cause birth defects.

How likely are PCBs to cause cancer?

Few studies of workers indicate that PCBs were associated with certain kinds of cancer in humans, such as cancer of the liver and biliary tract. Rats that ate food containing high levels of PCBs for two years developed liver cancer. The Department of Health and Human Services (DHHS) has concluded that PCBs may reasonably be anticipated to be carcinogens. The EPA and the International Agency for Research on Cancer (IARC) have determined that PCBs are probably carcinogenic to humans.

How can PCBs affect children?

Women who were exposed to relatively high levels of PCBs in the workplace or ate large amounts of fish contaminated with PCBs had babies that weighed slightly less than babies from women who did not have these exposures. Babies born to women who ate PCB-contaminated fish also showed abnormal responses in tests of infant behavior. Some of these behaviors, such as problems with motor skills and a decrease in short-term memory, lasted for several years. Other studies suggest that the immune system was affected in children born to and nursed by mothers exposed to increased levels of PCBs. There are no reports of structural birth defects caused by exposure to PCBs or of health effects of PCBs in older children. The most likely way infants will be exposed to PCBs is from breast milk. Transplacental transfers of PCBs were also reported In most cases, the benefits of breast-feeding outweigh any risks from exposure to PCBs in mother's milk.

How can families reduce the risk of exposure to PCBs?

❑ You and your children may be exposed to PCBs by eating fish or wildlife caught from contaminated locations. Certain states, Native American tribes, and U.S. territories have issued advisories to warn people about PCB-contaminated fish and fish-eating wildlife. You can reduce your family's exposure to PCBs by obeying these advisories.

❑ Children should be told not play with old appliances, electrical equipment, or transformers, since they may contain PCBs.

❑ Children should be discouraged from playing in the dirt near hazardous waste sites and in areas where there was a transformer fire. Children should also be discouraged from eating dirt and putting dirty hands, toys or other objects in their mouths, and should wash hands frequently.

❑ If you are exposed to PCBs in the workplace it is possible to carry them home on your clothes, body, or tools. If this is the case, you should shower and change clothing before leaving work, and your work clothes should be kept separate from other clothes and laundered separately.

Is there a medical test to show whether I've been exposed to PCBs?

Tests exist to measure levels of PCBs in your blood, body fat, and breast milk, but these are not routinely conducted. Most people normally have low levels of PCBs in their body because nearly everyone has been environmentally exposed to PCBs. The tests can show if your PCB levels are elevated, which would indicate past exposure to above-normal levels of PCBs, but cannot determine when or how long you were exposed or whether you will develop health effects.

Has the federal government made recommendations to protect human health?

The EPA has set a limit of 0.0005 milligrams of PCBs per liter of drinking water (0.0005 mg/L). Discharges, spills or accidental releases of 1 pound or more of PCBs into the environment must be reported to the EPA. The Food and Drug Administration (FDA) requires that infant foods, eggs, milk and other dairy products, fish and shellfish, poultry and red meat contain no more than 0.2-3 parts of PCBs per million parts (0.2-3 ppm) of food. Many states have established fish and wildlife consumption advisories for PCBs.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2000. Toxicological profile for polychlorinated biphenyls (PCBs). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs™ Internet address is http://www.atsdr.cdc.gov/toxfaq.html . ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

Bacey, Juanita@DTSC

From: Bacey, Juanita@DTSC
Sent: Thursday, August 15, 2013 12:59 PM
To: Larry Mencin (SW)
Cc: Pawan K. Sharma
Subject: S-W, Emeryville - Updated Soil Gas Report

Hi Larry,
DTSC has reviewed the Updated Soil Gas Data Summary and Evaluation Report (Report) for the Sherwin-Williams Site in Emeryville, California, dated August 15, 2013. The Report is hereby approved. Per Pawan, I should expect the hard copy soon. Thanks.

Nina Bacey
Environmental Scientist - Project Manager
Brownfields & Environmental Restoration
CA Dept. of Toxic Substances Control
700 Heinz Ave.
Berkeley, CA 94710
(510) 540-2480

[redacted] More

Sherwin-Williams Site, Emeryville

Inbox x

Cem Atabek Hi Nina, I'm working on the Draft EIR for the proposed development of the She... 12:03 PM (41 minut

Bacey, Juanita@DTSC <Juanita.Bacey@dtsc.ca.gov> 12:44 PM (0 minutes ago)

to me

Cem,
Yes, it would apply to the building as well. Also, I am no longer the project manager for this site. You may contact Karen Toth if you have any further questions. Thanks. Karen.toth@dtsc.ca.gov.

Nina

From: Cem Atabek [mailto:cem@baseline-env.com]
Sent: Monday, March 23, 2015 12:03 PM
To: Bacey, Juanita@DTSC
Subject: Sherwin-Williams Site, Emeryville

Hi Nina, I'm working on the Draft EIR for the proposed development of the Sherwin-Williams site in Emeryville. Could you clarify whether the LUC require that a soil vapor survey and indoor air evaluation be performed prior to construction or development would also apply to the existing building on-site (Build 31), which is currently proposed to be renovated and used for commercial purposes.

Thanks,

-Cem

Cem Atabek

BASELINE Environmental Consulting
5900 Hollis Street, Suite D
Emeryville, CA 94608
Main: (510) 420-8686
Cell: (510) 541-7879
If you want to send me a large file, please use this link:https://www.hightail.com/u/BL-Uploads

Cem Atabek

From: Biddle, Michael G. <MBiddle@bwslaw.com>
Sent: Monday, November 02, 2015 3:45 PM
To: Earl James; Joy Su
Cc: Miroo Desai; Michael Guina
Subject: UPRR Parcel D
Attachments: Emeryville Site Status 060115.doc

Earl and Joy – hope you are well. A couple of things related to UPRR Parcel D.

First the City is preparing an EIR for the proposed development of the Sherwin Williams site and a development option includes incorporating UPRR Parcel D into the site design/development and thus the EIR consultant needs the background information on the site history that is in the Phase I ESA that you did back in 2006 or thereabouts. The City has the hardcopy but would prefer to provide the consultant an electronic copy if possible. Can you please check your files to see if you can provide that and if so please coordinate with Miroo Desai, City Planner, who is copied here. As noted below the final site cleanup plan is on DTSC's envirostor website.

Also, with respect to UPRR Parcel D, I seem to recall we had completed the completion report but DTSC could not concur without a land use covenant. See attached monthly reports from Susan Coleman – this one was dated June 1, 2015. To finalize the land use covenant I believe I need an exhibit to show those areas of the site that were not remediated because of the need to maintain a slope along the property lines abutting the railroad right-of-way and the Technichem building. I believe there is an exhibit that shows these areas in the completion report, but I need to review that exhibit to see if it can be turned into an actual legal description of the area impacted.

Can you please send me an electronic copy of the completion report for UPRR Parcel D, along with the various attachments to it, and perhaps we can have a brief conversation sometime this week to see if we can get someone at EKI or a surveyor to prepare the legal description, provided it is something that can be described in a legal description. Thanks.

Mike

Michael G. Biddle | Partner
1901 Harrison Street, Suite 900 | Oakland, CA 94612
d - 510.903.8824 | t - 510.273.8780 | f - 510.839.9104
mbiddle@bwslaw.com | vCard | bwslaw.com
burke
BURKE, WILLIAMS & SORENSEN, LLP

The information contained in this e-mail message is intended only for the CONFIDENTIAL use of the designated addressee named above. The information transmitted is subject to the attorney-client privilege and/or represents confidential attorney work product. Recipients should not file copies of this email with publicly accessible records. If you are not the designated addressee named above or the authorized agent responsible for delivering it to the designated addressee, you received this document through inadvertent error and any further review, dissemination, distribution or copying of this communication by you or anyone else is strictly prohibited. IF YOU RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONING THE SENDER NAMED ABOVE AT 800.333.4297. Thank you.

From: Biddle, Michael G.
Sent: Monday, November 02, 2015 3:10 PM
To: 'Miroo Desai'
Cc: 'Michael Guina'
Subject: UPRR Parcel D

Miroo – it turns out the final site cleanup plan is on DTSC's envirostor website – below is the link – it is identified as UPRR Parcel D (60000833). I will send a separate email to EKI to see if they have the Phase I available.

Mike

http://www.envirostor.dtsc.ca.gov/public/final_documents2.asp?global_id=60000833&doc_id=6018815

Michael G. Biddle | Partner
1901 Harrison Street, Suite 900 | Oakland, CA 94612
d - 510.903.8824 | t - 510.273.8780 | f - 510.839.9104
mbiddle@bwslaw.com | vCard | bwslaw.com
BURKE, WILLIAMS & SORENSEN, LLP

The information contained in this e-mail message is intended only for the CONFIDENTIAL use of the designated addressee named above. The information transmitted is subject to the attorney-client privilege and/or represents confidential attorney work product. Recipients should not file copies of this email with publicly accessible records. If you are not the designated addressee named above or the authorized agent responsible for delivering it to the designated addressee, you received this document through inadvertent error and any further review, dissemination, distribution or copying of this communication by you or anyone else is strictly prohibited. IF YOU RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONING THE SENDER NAMED ABOVE AT 800.333.4297. Thank you.

ALAMEDA COUNTY

VERY HIGH FIRE HAZARD SEVERITY ZONES IN LRA

As Recommended By CAL FIRE

Fire and Resource Assessment Program
California Department of Forestry and Fire Protection

122°24'0"W 122°18'0"W 122°12'0"W 122°6'0"W 122°0'0"W 121°54'0"W 121°48'0"W 121°42'0"W 121°36'0"W 121°30'0"W

37°54'0"N 37°48'0"N 37°42'0"N 37°36'0"N 37°30'0"N 37°24'0"N

Albany
Berkeley
Emeryville
Piedmont
OAKLAND
Alameda
San Leandro
Castro Valley
Ashland
San Lorenzo
Hayward
Fairview
Union City
Fremont
Newark
Dublin
Pleasanton
Livermore
Altamont
Scotts Corner
Lake Del Valle
San Antonio Res.
Upper San Leandro
Calaveras Res

SAN FRANCISCO BAY

CONTRA COSTA COUNTY

SAN JOAQUIN COUNTY

SANTA CLARA COUNTY

02S 02W
01W
02S 02E
02S 03E
03S 03E
04S 01E
04S 02E
04S 03E
05S 01E
05S 02E
05S 03E
05S 04E

FIRE HAZARD SEVERITY ZONES

Local Responsibility Area	State or Federal Responsibility Area
VHFHSZ	VHFHSZ
Non-VHFHSZ	Non-VHFHSZ

Incorporated Cities

Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CAL FIRE) to identify areas of very high fire hazard severity zones within Local Responsibility Areas (LRA). Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on data and models of, **potential** fuels over a 30-50 year time horizon and their associated expected fire behavior, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure (including firebrands) to buildings. Details on the project and specific modeling methodology can be found at http://frap.fire.ca.gov/projects/hazard/fhz.html. Local Responsibility Area VHFHSZ maps were initially developed in the mid-1990s and are now being updated based on improved science, mapping techniques, and data.

In late 2005 to be effective in 2008, the California Building Commission adopted California Building Code Chapter 7A requiring new buildings in VH FHSZs to use ignition resistant construction methods and materials. These new codes include provisions to improve the ignition resistance of buildings, especially from firebrands. The updated very high fire hazard severity zones will be used by building officials for new building permits in LRA. The updated zones will also be used to identify property whose owners must comply with natural hazards disclosure requirements at time of property sale and 100 foot defensible space clearance. It is likely that the fire hazard severity zones will be used for updates to the safety element of general plans.

This specific map is based on a geographic information system dataset that depicts final CAL FIRE recommendations for Very High FHSZs within the local jurisdiction. The process of finalizing these boundaries involved an extensive local review process, the details of which are available at http://frap.cdf.ca.gov/projects/hazard/bInet/ (click on "Continue as guest without logging in"). Local government has 120 days to designate, by ordinance, very high fire hazard severity zones within its jurisdiction after receiving the recommendation. Local government can add additional VHFHSZs. There is no requirement for local government to report their final action to CAL FIRE when the recommended zones are adopted. Consequently, users are directed to the appropriate local entity (county, city, fire department, or Fire Protection District) to determine the status of the local fire hazard severity zone ordinance.

N W E S

0 5 Miles

0 10 Kilometers

Projection Albers, NAD 1927
Scale 1: 100,000
at 34" x 30"
September 03, 2008

The State of California and the Department of Forestry and Fire Protection make no representations or warranties regarding the accuracy of data or maps. Neither the State nor the Department shall be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any claim by any user or third party on account of, or arising from, the use of data or maps.

Obtain FRAP maps, data, metadata and publications on the Internet at http://frap.cdf.ca.gov
For more information, contact CAL FIRE-FRAP, PO Box 944246, Sacramento, CA 94244-2460, (916) 327-3939.

Arnold Schwarzenegger, Governor,
State of California
Mike Chrisman, Secretary for Resources,
The Resources Agency
Ruben Grijalva, Director,
Department of Forestry and Fire Protection

MAP ID: FHSZL_MAP

DATA SOURCES
CAL FIRE Fire Hazard Severity Zones (FHSZL06_3)
CAL FIRE State Responsibility Areas (SRA05_5)
CAL FIRE Incorporated Cities (Incorp07_3)
PLSS (1:100,000 USGS, Land Grants with CAL FIRE grid)

REPORT

Updated Soil Gas Data Summary and Evaluation Report

The Sherwin-Williams Company
1450 Sherwin Avenue
Emeryville, California

Prepared For:

The Sherwin-Williams Company
101 Prospect Avenue NW
Cleveland, OH 44115

Prepared By:

CDM Smith Inc.
100 Pringle Avenue, Suite 300
Walnut Creek, California 94596

August 15, 2013

CDM Smith

Table of Contents

Section 1 Introduction 1-1

1.1 Purpose 1-1
1.2 Scope of Work 1-2
1.3 Deviations from O&M Plan 1-3
1.4 Pre-Remedy Soil Gas Investigation 1-4
1.5 Report Organization 1-5

Section 2 Investigation Methodology and Procedures 2-1

2.1 Permitting, Utility Clearance, and Access 2-1
2.2 Soil Gas Monitoring Point Installation 2-1
2.3 Soil Gas Sampling – June 2012, January 2013 , and June 2013 2-1
2.3.1 Pre-Sampling Tests and Results 2-2
2.3.1.1 Vacuum Shut-in Test 2-2
2.3.1.2 Leak Check Test and Purge Test 2-2
2.3.2 Sample Collection 2-3
2.3.3 Sample Analyses 2-3
2.3.4 Quality Assurance and Quality Control Field Samples 2-3

Section 3 Results and Discussion 3-1

3.1 Sample Results 3-1
3.2.1 June 2012 Sampling Event 3-1
3.2.2 January 2013 Sampling Event 3-2
3.2.3 June 2013 Sampling Event 3-2
3.3 Quality Assurance and Quality Control Field Sample Results 3-3
3.4 Data Validation 3-4

Section 4 Conclusions and Recommendations 4-1

4.1 Conclusions 4-1
4.2 Recommendations 4-3

Section 5 References 5-1

List of Tables

Table 1 Soil Gas Monitoring Point Construction Details
Table 2 Selected Soil Gas Sample Results – Fixed Gases
Table 3 Selected Soil Gas Sample Results – Volatile Organic Compounds
Table 4 Selected Soil Gas Sample Results – Location Pairs

Attachments

Attachment A Drawings
Attachment B Laboratory Analytical Reports

Section 1
Introduction

On behalf of The Sherwin Williams Company (S-W), CDM Smith Inc. (CDM Smith) has prepared this *Updated Soil Gas Data Summary and Evaluation Report* (Report) for the S-W property, located at 1450 Sherwin Street in Emeryville, California, and a portion of the adjacent former Rifkin property, located at 4525 - 4563 Horton Street, to which hazardous substances have migrated from the S-W property. Collectively, the S-W property and this portion of the former Rifkin property are referred to as the "Site" within this Report. Novartis Vaccines and Diagnostics, Inc. (Novartis) is the current owner of the former Rifkin property. **Attachment A** presents the Site plan.

This Report updates CDM Smith's March 14, 2013 report which presented results from the first two post-remedy implementation soil gas sampling events, which were conducted in June 2012 and January 2013 (CDM Smith, 2013). There has not been any change in this Report to the presentation of the results from the first two post-remedy implementation soil gas sampling events from the March 14, 2013 report. The March 14, 2013 report recommended conducting an additional round of post-remedy implementation soil gas sampling in June 2013 (the third event). This Report updates the previous report with the results from the June 2013 third event and presents fresh conclusions and recommendations.

With the completion of the third post-remedy implementation soil gas sampling event, sufficient data have been collected to evaluate soil vapor intrusion concerns as a part of the future redevelopment plans for both the S-W and former Rifkin properties.

1.1 Purpose

The purpose of this Report is to document the results of the June 2012, January 2013, and June 2013 soil gas collection and analysis, specifically to:

- Describe the field work activities for the June 2012 soil gas monitoring point (SGMP) installations.
- Describe the field work activities for the June 2012, January, 2013, and June 2013 soil gas sampling events.
- Summarize the soil gas sample results for volatile organic compounds (VOCs) and evaluate the results against California Human Health Screening Levels (CHHSLs) in soil gas under residential use (Cal/EPA, 2009).
- Present conclusions regarding presence of VOCs in soil gas and recommendations for further evaluation.

The California Environmental Protection Agency (Cal/EPA) does not have quantitative soil gas standards. The O&M Plan establishes cleanup goals for Site contaminants of concern, including those in soil gas. The soil gas cleanup goals for the Site are defined by DTSC to be the residential CHHSLs. CHHSLs were developed by California Office of Environmental Health Hazard Assessment (OEHHA) on behalf of Cal/EPA. They represent concentrations of select contaminants that under standard exposure assumptions and chemical toxicity could trigger an unacceptable risk to human health, defined by an

excess lifetime cancer risk of one-in-a-million and a hazard quotient of 1.0 for noncancer health effects. Presence of these contaminants of concern in soil gas below their corresponding residential CHHSLs would indicate that the soil gas does not pose an unacceptable health risk to future people who may live or work at the Site nor would it require an environmental restriction be established for the Site.

1.2 Scope of Work

The scope of work for the June 2012 and January 2013 soil gas sampling activities was presented in the Site's *Operation and Maintenance Plan* (O&M Plan), dated December 11, 2012 (CDM Smith, 2012b). The O&M Plan is for the continued management of the remedy implemented at the Site and residual contaminants of concern (COCs) remaining at the Site. The O&M Plan was approved by California Department of Toxic Substances Control (DTSC) in their letter dated December 17, 2012 (DTSC, 2012b). The remedy implemented at the Site has been documented in the *Remedy Implementation Completion Report* (Completion Report), dated July 25, 2012 (CDM Smith, 2012a). The Completion Report was approved by DTSC in their letter dated August 6, 2012 (DTSC, 2012a).

The scope of work for the June 2013 soil gas sampling activities was presented in the March 14, 2013 report, which was to sample each SGMP for a third event consistent with the O&M Plan and the first two events (CDM Smith, 2013). The March 14, 2013 report was approved by DTSC in their letter dated April 15, 2013 (DTSC, 2013).

The scope of work for the June 2012, January 2013, and June 2013 activities consisted of the following key elements:

June 2012 – SGMP Installations

- Obtained drilling permits from Alameda County Public Works for the S-W property and former Rifkin property.
- Notified Underground Service Alert (USA) and Novartis about SGMP installations and had locations cleared of underground utilities by a private utilities locator.
- Installed the 12 planned SGMPs (9 on the S-W property and 3 on former Rifkin property). **Table 1** presents the construction details for the SGMPs. **Attachment A** presents the locations of the SGMPs on the Site plan.
- Completed well reports and submitted them to Alameda County Public Works.

June 2012, January 2013, and June 2013 – Soil Gas Sampling Events

- Performed vacuum shut-in and leak check tests to check seals on each SGMP and fittings for sample train before sampling.
- Purged minimum three (3) volumes of soil gas from each SGMP, measured for helium, oxygen, and total VOCs using hand-held meters.
- Connected a 1-liter Summa canister coupled with a flow controller to the sample train and collected soil gas sample at each SGMP.
- Set up and collected an ambient air sample with a 6-liter Summa canister coupled with a flow controller.

- Collected one (1) duplicate sample and maintained one (1) trip blank sample for each event.
- Recorded field measurements and data in log book and on field data sheets.
- Submitted samples to analytical laboratory under chain-of-custody protocols.

As presented in the O&M Plan, the SGMPs were installed at locations in proximity to previous soil gas sample locations, which occurred in November and December 2006, and is further discussed in **Section 1.4**.

1.3 Deviations from O&M Plan

SGMP installations and soil gas sample collection occurred in general accordance with the objectives, methodology, and procedures presented in the O&M Plan (CDM Smith, 2012b). The following deviations from the O&M Plan occurred:

1. O&M Plan states the second sampling event was to be December 2012. The second sampling event occurred in January 2013. The event was moved with DTSC notification due to issues with canisters procurement, helium availability, and precipitation events in December 2012.

2. DTSC guidelines specify 5 feet as an appropriate depth to collect soil gas samples in order to minimize effects from atmospheric conditions, including changes in barometric pressure, temperature, and/or breakthrough of ambient air from the surface. Due to anticipated shallow groundwater at portions of the Site, DTSC accepted the provision in the O&M Plan to allow installation of SGMPs as shallow as 3.0 feet. SGMP-01, -03, -07, -08, and -09 were installed at depths between 3 and 4 feet due to the depth of groundwater table at time of installation. The other SGMPs were installed at depths of 5 feet.

3. The O&M Plan states that for the shut-in test the soil gas was to be purged using a 200 milliliters per min (ml/min) flow regulator and a vacuum canister. For the three soil gas sampling events, disposable syringes were used to purge the soil gas, maintaining a purge rate of less than 200 ml/min.

4. The O&M states that each SGMP will be sampled during each sampling event. During the January 2013 event, SGMP-02 and -08 could not be sampled due to the presence of groundwater. During installation in June 2012, the groundwater table was lower and the SGMPs were installed above the groundwater table (at that time) and sampled. Based on groundwater levels measured from on Site groundwater monitoring wells, the groundwater table rose approximately 1.5 feet from June 2012 to January 2013. Each SGMP was sampled during the June 2012 and June 2013 events.

5. O&M Plan states the SGMPs were to be abandoned after the second sampling event. Given the results from the June 2012 event, and subsequent to the O&M Plan completion, it was decided by DTSC and S-W to not abandon them during the January 2013 event.

6. The O&M Plan states that the analytical laboratory was to analyze for oxygen and nitrogen from the samples submitted. For the January 2013 sampling event, the laboratory could not analyze for oxygen and nitrogen from the samples; for this event, oxygen was measured using a helium/oxygen detector during sampling and nitrogen was not analyzed. For the June 2013 sampling event, the laboratory did analyze for oxygen from the samples and nitrogen was not analyzed. For the June 2012 event, the laboratory did analyze for oxygen and nitrogen from the samples.

7. The O&M Plan states the soil gas samples were to be analyzed using EPA Method TO-15 for VOCs. For the January 2013 sampling event, samples from three locations (SGMP-03, -06, and -07) were analyzed for VOCs using EPA Method 8260B because these samples could not be diluted into the TO-15 calibration range. The other samples during this event were analyzed for VOCs using EPA Method TO-15. It is the analytical laboratory's policy to analyze these samples using EPA Method 8260B under these circumstances. EPA Method 8260B is a more rigorous method with lower method detection limits compared to EPA Method TO-15. The June 2012 and June 2013 samples were analyzed for VOCs using EPA Method TO-15.

1.4 Pre-Remedy Soil Gas Investigation

In November/December 2006, CDM Smith conducted a soil gas investigation at the Site. This work was performed in accordance with the work plan submitted to the DTSC on November 3, 2006 and DTSC's approval letter provided to CDM Smith on November 14, 2006. Soil gas was sampled from locations CDM-SB54 through CDM-SB61, CDM-SB65, CDM-SB67, and CDM-SB71 to CDM-SB74. See **Attachment A** for their locations. The results from the November/December 2006 investigation yielded the following conclusions:

- VOCs were present in soil gas at the Site, as previously inferred from vadose zone soil and shallow groundwater sample results. The southern portion of the former Rifkin property and the adjacent western portion of the former raised cap area had the highest VOCs in soil gas concentrations.
- The presence of these VOCs in the subsurface were attributed to historic releases of raw materials at the northwest corner of the former raised cap area, historic operations by various businesses formerly present on the former Rifkin property, and historic releases on properties located upgradient of the Site and migration of impacted groundwater from these properties to the Site.
- The only VOC detected above its residential CHHSL on both the S-W and former Rifkin properties was benzene in 6 of the 9 samples considered representative of soil gas quality. [Some samples were considered not be representative of soil gas quality due to elevated concentrations of the leak check gas, helium, in the samples.]
- In addition to benzene, 1,2-dichloroethane (1,2-DCA) was detected above its residential CHHSL in one (1) sample from the former Rifkin property.
- Methane in soil gas was detected in samples collected at both the S-W and former Rifkin properties. The methane at these areas is attributed to pervasive methanogenic conditions within the silt/clay zones, which is typical of the bay muds, and localized methanogenic conditions within underlying groundwater in sandy zones that have been impacted with organic compounds. Because the detected methane is naturally occurring, it is not governed by Cal/EPA (DTSC).

The results from this investigation were presented to DTSC in a report dated January 18, 2007 (CDM, 2007) and supported the development of the Site remedy. The Site remedy was implemented between March 2011 and April 2012 and documented in the Remedy Implementation Completion Report (CDM Smith, 2012a).

1.5 Report Organization

This Report is organized into 5 sections of text and references, plus tables and attachments. A brief description of each section is below.

Section 1 – Introduction: This section introduces the purpose, report organization, scope of work, deviations from the O&M Plan, and a summary of the pre-remedy implementation soil gas investigation in 2006 and its findings.

Section 2 – Investigation Methodology and Procedures: This section describes the methodology and procedures used during the June 2012, January 2013 and June 2013 field work.

Section 3 – Results and Findings: This section presents the sample and quality assurance/quality control results and findings from the June 2012, January 2013 and June 2013 sampling events.

Section 4 – Conclusions and Recommendations: This section provides conclusions from the soil gas results and recommendations for further evaluation.

Section 5 – References: This section presents references used in this Report.

Section 2

Investigation Methodology and Procedures

Soil gas monitoring points (SGMPs) were installed and sampled at 12 locations at the Site in June 2012. In January 2013, these SGMPs were sampled during a second event, except SGMP-02 and -08. In June 2013, all 12 SGMP were sampled during a third event.

2.1 Permitting, Utility Clearance, and Access

Prior to installation of the SGMPs, installation permits were obtained by from Alameda County Public Works Agency (ACPWA). Underground Service Alert (USA) was contacted at least 72 hours prior to installation to determine the locations of any subsurface utilities. Subtronic Corporation, a private utilities locator, determined the locations of subsurface utilities at the Site. Prior to the beginning of fieldwork, CDM Smith personnel coordinated with S-W and Novartis personnel for access to the properties and to clear locations of underground utilities.

2.2 Soil Gas Monitoring Point Installation

Methods to penetrate the subsurface for installation of SGMPs consisted of Concrete Coring (where appropriate) and Direct Push drilling. Concrete Coring prior to drilling was necessary at 6 locations due to concrete or paved asphalt overlying the soil. Vickers Concrete Sawing, Inc., a subcontracted coring company and CDM Smith personnel were on Site to core the 6 locations.

CDM Smith personnel and a subcontracted drilling company, TEG, Inc., were on Site during installation and sampling activities. A direct push rig with 1.5-inch outside diameter steel rods was used to penetrate through the soil to the target total depth. Total depth varied by location depending on the depth to groundwater at the location. Rods were retracted slightly to expose the soil formation and set the SGMP. Soil cores were not collected during installation.

A SGMP with a 6-inch stainless steel soil gas implant screen was set and a measured length of 1/8-inch outside diameter Nylaflow tubing was attached. The SGMP was installed through the rods and set 1-foot above the bottom of the borehole. The SGMP was surrounded with #2/12 filter sand to 2-feet above the bottom of the borehole; with the SGMP centered in the sand. Bentonite chips were placed above the sand, and then a hydrated bentonite slurry was place to the surface. The bentonite sealed the SGMP from the ground surface. The Alameda County grout inspector was on Site to view the sealing of the SGMPs. **Table 1** provides a summary of construction details of the installed SGMPs.

2.3 Soil Gas Sampling – June 2012, January 2013 , and June 2013

The soil gas sampling methodology is in accordance with the O&M Plan and is consistent with applicable portions of the following guidance documents:

- Advisory – Soil Gas Investigations. California Environmental Protection Agency, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, and San Francisco Regional Water Quality Control Board. April 2012.

- Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). California Environmental Protection Agency, Department of Toxic Substances Control, October 2011.

Attachment A shows a schematic of the sampling train utilized for each sampling event. Swagelock® fittings were used for the connections. After assembly, and prior to each sample collection, the train was tested for leaks. After the train was tested, sample collection occurred. Quality assurance and quality control field samples were also taken. These samples were submitted to the analytical laboratory for analysis. These procedures are described in the O&M Plan and summarized in this section.

2.3.1 Pre-Sampling Tests and Results

The sample train was tested for leaks by performing a vacuum shut-in test, purge test, and leak check test.

2.3.1.1 Vacuum Shut-in Test

At each SGMP, after the sample train was assembled, a vacuum shut-in test was performed. The shut-in test checked for any leaks within the sample train. Each vacuum shut-in test was successful in demonstrating there were no leaks within the sample train.

For each test, the valve to the downhole tubing was closed and the remainder of the valves in the train were opened. A disposable syringe was connected at one end of the train and a Summa canister under vacuum at the other end. The vacuum gauge on the Summa canister was used to check the change in vacuum within the sample train caused by pulling on the syringe. The vacuum in the sample train was checked for about one minute. For the three sampling events, the vacuum was maintained with no change in pressure observed on the gauges for each sample train.

2.3.1.2 Leak Check Test and Purge Test

After the vacuum shut-in test, a shroud was placed over the SGMP and shut off valve. The valve to the Summa canister was closed and the valve to the sampling port was opened. The shroud was filled with helium. Helium was used as a leak check compound to ensure that the bentonite seal was intact. The shroud was placed completely against the ground surface, surrounding the SGMP and sample train, to maintain a constant helium concentration in the atmosphere around the sampling location. The concentration of helium under the shroud was monitored with a portable helium/oxygen detector.

Once a percent of helium higher than 30% was detected under the shroud, the SGMP was purged. A minimum of three (3) volumes of soil gas were purged from each location with a clean disposable syringe. The syringe drew a volume of soil gas from the sample port through the sample train and the soil gas was released to the atmosphere. After 1.5 purge volumes, the soil gas that was pulled with the syringe from the port was pushed through the helium/oxygen detector to check for helium.

During the June 2012 sampling event, helium was detected during purge testing of four (4) SGMPs. At SGMP-03, a 2.5% concentration of helium was detected; at SGMP-06, a 0.30% concentration was detected; at SGMP-07, a 2.9% concentration was detected; and, at SGMP-11, a 1.67% concentration was detected. The SGMPs were inspected thoroughly and no sources for leaks were noted in the construction of the SGMPs or the sample train. The helium concentrations were less than 5%, the acceptable presence of helium (leak-test gas) without compromising sample integrity and representiveness of soil gas, per Cal/EPA Advisory - Active Soil Gas Investigation (April 2012). During

the January 2013 event, SGMP-06 was the only SGMP where helium was detected during the purge test (at 3.0%). During the June 2013 event, SGMP-09 was the only SGMP where helium was detected during the purge test (at 0.30%).

2.3.2 Sample Collection

After the completion of the leak tests and purge test, soil gas was collected in a 1-liter Summa canister using a flow regulator of 50 mL/min. Each sample location had a uniquely designated, clean Summa canister and flow regulator supplied by the analytical laboratory. The Summa canister consisted of a stainless steel canister that was under absolute vacuum (-30 in Hg). At the time of sample collection the valves were opened up and the Summa canister that was attached to the end of the sample train was opened and allowed to fill until the vacuum gauge read -5 in Hg. A schematic of the sampling train is shown in **Attachment A**. Once the canister was filled, it was closed and put in its original, laboratory supplied box. At the end of each event, the canisters were submitted to the laboratory for analysis under chain-of-custody protocols.

In June 2012, Test America Laboratory was used and in January 2013 and June 2013 McCampbell Analytical was used to supply the canisters and analyze the samples. Laboratory analytical reports in **Attachment B** include initial and final vacuum for the Summa canisters, sample times, canister serial numbers, flow regulator serial numbers for the samples.

Samples were not collected at SGMP-02 and SGMP-08 during the January 2013 sampling event due to the presence of groundwater in these monitoring points; all other SGMPs were sampled during this event. Each SGMP was sampled during the June 2012 and June 2013 events.

2.3.3 Sample Analyses

Soil gas samples were analyzed within 14 days of collection by the analytical laboratories. The samples were analyzed for VOCs using EPA Method TO-15, except for a few samples during the January 2013 sampling event. During the January 2013, sampling event, samples from SGMP-07, SGMP-03, and SGMP-06 were analyzed for VOCs using EPA Method 8260B (as discussed in **Section 1.3**). Samples were also analyzed for helium, carbon dioxide, and methane by ASTM D-1946 during the three events and for oxygen and nitrogen by ASTM D-1946 during the June 2012 event. During the January 2013 sampling event, the samples were not analyzed for oxygen and nitrogen (as discussed in **Section 1.3**); oxygen was measured in the field using a portable detector. During the June 2013 sampling event, the samples were not analyzed for nitrogen (as discussed in **Section 1.3**); they were analyzed for oxygen by ASTM D-1946.

2.3.4 Quality Assurance and Quality Control Field Samples

Per the O&M Plan, field Quality Assurance/Quality Control (QA/QC) samples were collected and analyzed to establish confidence in sample collecting procedures. One duplicate sample was collected during each soil gas sampling event. SGMP-10 was sampled in duplicate during the three events. The duplicate sample was analyzed by the same methods as the original parent sample. A trip blank was maintained during each event to ensure the integrity of the sample canisters during the shipping and handling. The trip blank was a 1-liter Summa canister that traveled from the laboratory to the Site, remained on Site during each sampling event, and traveled back to the laboratory for analysis. The trip blank was not exposed to the atmosphere.

Section 3
Results and Discussion

This section presents the sample results, quality assurance/quality control field sample results, and data validation from the June 2012, January 2013 and June 2013 post-remedy implementation soil gas sampling events.

3.1 Sample Results

A summary of the fixed gas (helium, oxygen, nitrogen, carbon dioxide, and methane) results from the three sampling events are presented in **Table 2**. A summary of the VOC results from the three sampling events are presented in **Table 3**. **Table 3** presents those VOCs detected above residential CHHSLs, along with selected others including those that were detected. The complete results from the three soil gas sampling events (June 2012, January 2013, and June 2013) are provided in the laboratory analytical reports in **Attachment B**.

3.2.1 June 2012 Sampling Event

The following are the findings from the June 2012 sample results:

- Helium was detected in three (3) SGMP samples, ranging from less than reporting limit of 0.020% to detections up to 0.38%. Reporting limits and detections were less than 5%, the acceptable presence of helium (leak-test gas) without compromising sample integrity and representiveness of soil gas, per Cal/EPA Advisory - Active Soil Gas Investigation (April 2012).

- Methane was detected within its lower and upper explosion limits (LEL/UEL) of 4.4 to 17 % in one sample from the S-W property (SGMP-07 at 12%) and one sample from the former Rifkin property (SGMP-11 at 4.6%). It was detected above its UEL in the sample from SGMP-03 (at 40%) on the S-W property. Other detections and reporting limits for methane were less than its LEL. Methane, as a naturally occurring chemical substance, is not governed by Cal/EPA (DTSC).

- Benzene was detected in soil gas above its residential CHHSL of 36.2 micrograms per cubic meter (µg/m^3) in samples from both the S-W property and the former Rifkin property. Only S-W property sample from SGMP-01 had a detection lower than its CHHSL (at 18 µg/m^3). Benzene was detected above its industrial / commercial CHHSL of 122 µg/m^3 at S-W property samples from SGMP-04, -05, and -06 and former Rifkin samples from SGMP-10, -11, and -12. Benzene was not detected in the sample from SGMP-07 with an elevated reporting limit of 2,300 µg/m^3.

- Ethylbenzene was detected in soil gas above its residential CHHSL of 420 µg/m^3 and industrial/commercial CHHSL of 1,400 µg/m^3 in the sample from SGMP-06 (at 11,000 µg/m^3). Ethylbenzene was not detected in the sample from SGMP-07 with an elevated reporting limit of 4,200 µg/m^3. Other detections and reporting limits for ethylbenzene were less than its residential CHHSL.

- No other VOC was detected above its residential CHHSL, as established. VOCs detected in one or more sample less than their respective residential CHHSLs were toluene, xylenes, and cis-1,2-dichloroethene (cDCE). Elevated reporting limits for naphthalene, tetrachloroethene (PCE), 1,2-

DCA, vinyl chloride, and carbon tetrachloride from SGMP-03, -06, -07, -08, and/or -12 were higher than their respective residential CHHSLs.

- Several other VOCs were detected that do not have established CHHSLs for soil gas (see Table 3).

3.2.2 January 2013 Sampling Event

The following are the findings from the January 2013 sample results:

- Helium was detected in the sample from SGMP-01 at 0.023%. Reporting limits and this detection were less than 5%, the acceptable presence of helium (leak-test gas) without compromising sample integrity and representiveness of soil gas, per Cal/EPA Advisory - Active Soil Gas Investigation (April 2012).
- Methane was detected within its lower and upper explosion limits (LEL/UEL) of 4.4 to 17 % in one sample from the S-W property (SGMP-07 at 8.4%). It was detected above its UEL in two samples on the S-W property (SGMP-06 at 19% and SGMP-03 at 33%). Other detections and reporting limits for methane were less than its LEL. Methane, as a naturally occurring chemical substance, is not governed by Cal/EPA (DTSC).
- Benzene was detected in soil gas above its residential CHHSL of 36.2 $\mu g/m^3$ and industrial/commercial CHHSL of 122 $\mu g/m^3$ in one S-W property sample (SGMP-06 at 2,700 $\mu g/m^3$). Other detections and reporting limits for benzene were less than its residential CHHSL.
- Ethylbenzene was detected in soil gas above its residential CHHSL of 420 $\mu g/m^3$ and industrial/commercial CHHSL of 1,400 $\mu g/m^3$ in one S-W property sample (SGMP-06 at 61,000 $\mu g/m^3$). Other detections and reporting limits for ethylbenzene were less than its residential CHHSL.
- No other VOC was detected above its residential CHHSL, as established. VOCs detected in one or more sample less than their respective residential CHHSLs were toluene, xylenes, MTBE, and cDCE. Reporting limits for VOCs not detected were less than their respective residential CHHSLs, as established.
- Several other VOCs were detected that do not have established CHHSLs for soil gas (see Table 3).

3.2.3 June 2013 Sampling Event

The following are the findings from the June 2013 sample results:

- Helium was detected in the SGMP samples ranging from 0.010 to 0.32%. Reporting limits and the detections were less than 5%, the acceptable presence of helium (leak-test gas) without compromising sample integrity and representiveness of soil gas, per Cal/EPA Advisory - Active Soil Gas Investigation (April 2012).
- Methane was detected within its lower and upper explosion limits (LEL/UEL) of 4.4 to 17 % in one samples from the S-W property (SGMP-07 at 7.8%). It was detected above its UEL in the sample from SGMP-03 (at 49%) on the S-W property. Other detections and reporting limits for methane were less than its LEL. Methane, as a naturally occurring chemical substance, is not governed by Cal/EPA (DTSC).

- Benzene was detected in soil gas above its residential CHHSL of 36.2 µg/m^3 in one former Rifkin property sample (SGMP-12 at 88 µg/m^3). Other detections and reporting limits for benzene were less than its residential CHHSL, except two locations (SGMP-03 and -07, both were non-detect with elevated reporting limits of 520 µg/m^3 each).
- Naphthalene was detected in soil gas above its residential CHHSL of 31.9 µg/m^3 in two former Rifkin property samples (SGMP-10 at 33 µg/m^3 and SGMP-11 at 46 µg/m^3) and one S-W property sample (SGMP-08 at 76 µg/m^3). Other detections and reporting limits for naphthalene were less than its residential CHHSL, except three locations (SGMP-03 and -07, both were non-detect with elevated reporting limits of 880 µg/m^3 each, and SGMP-06, non-detect with an elevated reporting limit of 44 µg/m^3). Naphthalene was below its residential CHHSL at SGMP-10 and SGMP-11 during the June 2012 and January 2013 events. SGMP-08 was not sampled in January 2013 due to presence of moisture and its results from June 2012 had an elevated reporting limit for naphthalene of 780 µg/m^3.
- No other VOC was detected above its residential CHHSL, as established. Elevated reporting limits for ethylbenzene, tetrachloroethene (PCE), trichloroethene (TCE), 1,2-DCA, vinyl chloride, and carbon tetrachloride from SGMP-03, -06, and/or -07 were higher than their respective residential CHHSLs.
- Several other VOCs were detected that do not have established CHHSLs for soil gas (see Table 3).

3.3 Quality Assurance and Quality Control Field Sample Results

QA/QC sample results are summarized in **Table 2** and **Table 3**, along with the field samples and include the duplicate field samples from SGMP-10, ambient air sample, and trip blank. The following is a summary of the QA/QC sample results:

- The duplicate sample results from SGMP-10 were within 5% of the parent sample results, except for two results. The January 2013 results for trichlorofluoromethane between the parent and duplicate samples had a differential of 17% (detections of 17 and 20 µg/m^3 from the parent and duplicate samples) and the June 2013 results for naphthalene between the parent and duplicate samples had a differential of 36% (detections of 33 and 21 µg/m^3 from the parent and duplicate samples). The duplicate results indicate appropriate field sampling accuracy and precision was achieved.
- Two constituents were detected in the June 2012 trip blank: methane at 0.00014% and 2-butanone at 1.2 µg/m^3. These concentrations are considered to be negligible compared to detections found in field samples, which were up to 40% for methane and 20 µg/m^3 for 2-butanone. A CHHSL for 2-butanone has not been established. The trip blank results indicate that neither sample collection procedures nor field conditions affected field sample quality.
- Helium was detected in the January 2013 trip blank at 0.016%. This concentration is considered to be negligible compared to detections found in field samples, which were up to 0.38% . Methane and VOCs were not detected in the January 2013 and June 2013 trip blanks. The trip blank results indicate that neither sample collection procedures nor field conditions affected field sample quality.

- Several VOCs were detected in the ambient air samples from the three events. The three VOCs detected above their respective CHHSLs in the soil gas samples (benzene, ethylbenzene, and naphthalene) were not detected in the June 2012 and June 2013 ambient air samples. Benzene was detected in the January 2013 ambient air sample, at 1.3 µg/m^3; ethylbenzene and naphthalene were not detected in this sample. Other VOCs detected in any of the ambient air samples were toluene, trichlorofluoromethane, chloromethane, and methylene chloride. The ambient air sample results indicate that ambient conditions did not affect field sample quality.

3.4 Data Validation

According to the QA/QC data provided by both laboratories, results from laboratory QA/QC samples were within their acceptable ranges. See laboratory analytical reports in **Attachment B**.

Section 4
Conclusions and Recommendations

This section presents the conclusions and recommendations based on the June 2012, January 2013, and June 2013 post-remedy implementation soil gas sampling events.

4.1 Conclusions

- With the completion of the third soil gas sampling event, sufficient data have been collected to evaluate soil vapor intrusion concerns as a part of the future redevelopment plans for both the S-W and former Rifkin properties.
- Benzene, ethylbenzene, and/or naphthalene were the only VOCs detected above their respective residential CHHSLs in the sampling events. Several VOCs had elevated reporting limits above their respective residential CHHSL during the June 2012 and June 2013 events; reporting limits were less than their respective residential CHHSL during the January 2013 event.
- During the June 2012 event, benzene was detected from 11 of the 12 sampling locations with 10 of the 11 detections exceeding its residential CHHSL; at SGMP-07, benzene was not detected, however the reporting limit was above its residential CHHSL. During the January 2013 event, benzene was detected above its residential CHHSL from SGMP-06, with detections and reporting limits for other samples less than its residential CHHSL. During the June 2013 event, benzene was detected above its residential CHHSL in the sample from SGMP-12; at two locations (SGMP-03 and SGMP-07), benzene was not detected, however the reporting limit was above its residential CHHSL. The sample results for the locations, except SGMP-06, demonstrate a substantial decrease of benzene concentrations, to less than reporting limits at most locations between the June 2012 and January 2013 events. At SGMP-06, benzene was reported to increase from 600 to 2,700 µg/m^3 between the first two events, and decreased to less than 26 µg/m^3 during the third event. SGMP-12 was the only location to report an increase for benzene between the January 2013 and June 2013 events, from 25 to 88 µg/m^3.
- Similar to benzene, ethylbenzene decreased to less than reporting limits from June 2012 to January 2013, with the exception of SGMP-06. During the June 2012 event, ethylbenzene was detected at 11 of the 12 sampling locations with 1 location exceeding its residential CHHSL (SGMP-06); at SGMP-07, ethylbenzene was not detected, however the reporting limit was above its residential CHHSL. During the January 2013 event, ethylbenzene continued to be detected above its residential CHHSL at SGMP-06, with detections and reporting limits for other samples less than its residential CHHSL. At SGMP-06, ethylbenzene was reported to increase from 11,000 to 61,000 µg/m^3 between the first two events, and then decreased to 64 µg/m^3 during the June 2013 event (less than its residential CHHSL).
- Similar to benzene and ethylbenzene, toluene and xylenes concentrations also decreased from June 2012 to January 2013, again with the exception of SGMP-06. At SGMP-06, toluene was reported to increase from 380 to 2,500 µg/m^3 and total xylenes from 18,330 to 73,000 µg/m^3

between the first two events, and then decreased to less than 31 µg/m^3 and less than 110 µg/m^3, respectively, during the June 2013 event.

- Naphthalene was detected sporadically at concentrations less than its residential CHHSL, at several locations during the June 2012 and January 2013 event, between 8.4 and 16 µg/m^3, In June 2013, it was detected above its residential CHHSL at three locations (SGMP-08, -10, and -11 up to 76 µg/m^3).
- The observed decreases in VOC in soil gas concentrations observed between the June 2012 and January 2013 events (with the exception of SGMP-06) may be attributed to the changes in the groundwater table during and after remedy implementation. The dewatering operations during remedy implementation depressed the groundwater table within and surrounding the excavation, including the vicinity of the SGMPs . The Site groundwater monitoring program results indicate that resaturation of the Site shallow aquifer occurred sometime in late 2012 after precipitation events in fall of 2012. This observation about resaturation is confirmed by the lack of groundwater in SGMP-02 and SGMP-08 in June 2012 and its presence in January 2013. The depression of the groundwater table prior to and during the June 2012 event created a temporary additional thickness in the vadose zone. Benzene and other VOCs potentially adsorbed to these exposed sediments surrounding the excavation would have had the opportunity to partition to a vapor phase. This would have resulted in the higher concentrations observed during the June 2012 sampling event. The subsequent resaturation of the aquifer in late 2012 submerged this temporary vadose zone, significantly reducing the potential for partitioning from an adsorbed phase to a vapor phase, and resulting in the lower concentrations observed during the January 2013 sampling event.
- Further decreases in VOC in soil gas concentrations were observed between the January 2013 and June 2013 events (with the exception of naphthalene) are also be attributed to continued stabilization of conditions after resaturation of the shallow aquifer. The range of total VOC concentrations from the SGMPs (excluding SGMP-06) decreased over the three events:
  - June 2012: total VOCs ranged between 82 and 15,000 µg/m^3.
  - January 2013: total VOCs ranged between non-detect and 1,434 µg/m^3.
  - June 2013: total VOCs ranged between non-detect and 399 µg/m^3.
- For SGMP-06, total VOCs have varied over the three events:
  - June 2012: total VOCs of 35,830 µg/m^3.
  - January 2013: total VOCs of 148,000 µg/m^3.
  - June 2013: total VOCs of 188 µg/m^3.
- Benzene and ethylbenzene were the primary VOCs detected from SGMP-06. The observed lag in reduction in concentrations of benzene and ethylbenzene at SGMP-06 indicates potential for one or more differentiators from the other SGMPs:
  - The source of VOCs in this vicinity of SGMP-06 may be from both vadose zone soil and groundwater (unlike the other locations where VOCs in soil gas are currently attributed

solely to groundwater ,with most of these other locations within the remedy excavation / backfill portion of the Site, surrounded by clean backfill.

- Resaturation of the aquifer may have taken longer in the vicinity of SGMP-06, given the presence of the slurry wall nearby (see **Attachment A**).

- There may be a seasonal variation in the VOC concentrations in the vicinity of SGMP-06, likely due to seasonal changes in groundwater movement pattern in the vicinity of the slurry wall.

- Benzene in soil gas at SGMP-12 and naphthalene in soil gas concentrations at SGMP-10, -11, and -12 increased to above their respective residential CHHSLs between the first two events (January 2013) and third event (June 2013). These three SGMPs are located on the former Rifkin property. VOC concentrations on the former Rifkin property during June 2013 event are observed to be two to three orders of magnitude lower compared to those during the 2006 soil gas sampling event (see **Section 1.4** and **Table 4**).

4.2 Recommendations

- CDM Smith recommends abandonment of the following SGMPs: SGMP-01, -02, -03, -04, -05, -07, and -09. According to the most recent groundwater monitoring report (ARCADIS, 2013), resaturation of the shallow aquifer has been achieved at the Site since late 2012; and, based on the results from the January 2013 and June 2013 soil gas sampling events, VOCs in soil gas concentrations at these SGMPs are understood to be less than residential CHHSLs. Additional soil gas sampling is not needed at these locations.

- Based on the findings from the soil gas sampling events at the following SGMPs, CDM Smith recommends conducting evaluations of soil vapor intrusion concerns as a part of the future redevelopment plans based on the results on each property:

  - S-W property: SGMP-06 for benzene and ethylbenzene and SGMP-08 for naphthalene.

  - Former Rifkin property: SGMP-10, -11, and -12 for benzene and naphthalene.

- Given neither the S-W property nor the former Rifkin property have buildings overlying the abovementioned areas of VOC impacts in soil gas, evaluations of current conditions are not needed. These evaluations should be incorporated into their respective future property redevelopment plans for City of Emeryville approval and soil and/or groundwater management plans for DTSC approval. This approach is consistent with the existing Covenant To Restrict Use of Property, recorded for the S-W property, which states that prior to construction or other development of the S-W property, the owner shall submit to DTSC an evaluation of soil gas conditions and indoor air quality.

- CDM Smith recommends that SGMP-06, -08, -10, -11, and -12 be maintained in case future evaluations can benefit from additional data collection.

Section 5
References

ARCADIS, 2013. Data Summary Report for Groundwater Monitoring Activities for the Period from January 1, 2013 through June 30, 2013 for the Sherwin-Williams Site Located at 1450 Sherwin Avenue, Emeryville, California. ARCADIS U.S., Inc. July 11, 2013.

Cal/EPA, 2009. Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment. January 2005, revised November 2009.

CDM, 2007. Data Summary Report for Soil Gas Investigation Activities, Sherwin-Williams Company, Emeryville, California. Camp Dresser & McKee Inc. January 17, 2007.

CDM Smith, 2013. Soil Gas Data Summary and Evaluation Report, Sherwin-Williams Company, Emeryville, California. CDM Smith Inc. March 14, 2013.

CDM Smith, 2012b. Operation and Maintenance Plan, Sherwin-Williams Company, Emeryville, California. CDM Smith Inc. December 11, 2012.

CDM Smith, 2012a. Remedy Implementation Completion Report, Sherwin-Williams Company, Emeryville, California. CDM Smith Inc. July 25, 2012.

DTSC, 2013. Letter providing approval of the March 14, 2013 Soil Gas Data Summary and Evaluation Report. California Environmental Protection Agency, Department of Toxic Substances Control. April 15, 2013.

DTSC, 2012b. Letter providing approval of the December 11, 2012 Operation and Maintenance Plan. California Environmental Protection Agency, Department of Toxic Substances Control. December 17, 2012.

DTSC, 2012a. Letter providing approval of the July 25, 2012 Remedy Implementation Completion Report. California Environmental Protection Agency, Department of Toxic Substances Control. August 6, 2012.

Tables

Table 1
Sherwin-Williams Emeryville Remediation Project
SOIL GAS MONITORING POINT CONSTRUCTION DETAILS

Identification	Soil Gas Monitoring Point Construction Details					
	Date Constructed	Tubing Material	Tubing Diameter (inches)	Total Depth (feet bgs)	Screen Interval Depths	
					Top (feet toc)	Bottom (feet toc)
Sherwin-Williams Property						
SGMP-01	6/7/2012	Nyaflow	1/8	3.0	2.5	3.0
SGMP-02	6/4/2012	Nyaflow	1/8	5.0	4.5	5.0
SGMP-03	6/4/2012	Nyaflow	1/8	4.0	3.5	4.0
SGMP-04	6/4/2012	Nyaflow	1/8	5.0	4.5	5.0
SGMP-05	6/4/2012	Nyaflow	1/8	5.0	4.5	5.0
SGMP-06	6/4/2012	Nyaflow	1/8	5.0	4.5	5.0
SGMP-07	6/5/2012	Nyaflow	1/8	3.5	3.0	3.5
SGMP-08	6/5/2012	Nyaflow	1/8	3.5	3.0	3.5
SGMP-09	6/7/2012	Nyaflow	1/8	3.0	2.5	3.0
Former Rifkin Property - Novartis Vaccines and Diagnostics, Inc.						
SGMP-10	6/5/2012	Nyaflow	1/8	5.0	4.5	5.0
SGMP-11	6/5/2012	Nyaflow	1/8	5.0	4.5	5.0
SGMP-12	6/5/2012	Nyaflow	1/8	5.0	4.5	5.0

Notes:
bgs = below ground surface
toc = top of casing

Table 2
Sherwin-Williams Emeryville Remediation Project
SELECTED SOIL GAS SAMPLE RESULTS - FIXED GASES

Chemical	Unit	Action Level	Soil Gas Monitoring Point (SGMP)													Ambient Condition	Trip Blank
			SGMP-01	SGMP-02	SGMP-03	SGMP-04	SGMP-05	SGMP-06	SGMP-07	SGMP-08	SGMP-09	SGMP-10	SGMP-10 Duplicate	SGMP-11	SGMP-12		
Fixed Gases by ASTM-D1946 - June 2012																	
Helium	% v/v	5	<0.039	**0.38**	<0.038	<0.041	<0.041	<0.043	<0.040	**0.050**	**0.51**	<0.040	<0.042	<0.042	<0.036	<0.020	<0.020
Carbon Dioxide	% v/v	--	**0.015 J**	**7.9**	**25**	**7.1**	**7.3**	**8.0**	**18**	**0.070**	**0.071**	**18**	**18**	**13**	**24**	**0.046**	<0.010
Methane	% v/v	4.4 - 17	**0.00026 J**	**0.00052**	**40**	**0.047**	**0.38**	**3.8**	**12**	**0.34**	**0.00096**	**0.19**	**0.19**	**4.6**	**0.17**	**0.00023 J**	**0.00014 J**
Nitrogen	% v/v	--	**77**	**80**	**33**	**87**	**87**	**81**	**66**	**86**	**75**	**77**	**77**	**78**	**72**	**75**	**97**
Oxygen	% v/v	--	**19**	**7.1**	**0.94**	**1.7**	**1.2**	**2.2**	**1.1**	**10**	**20**	**1.7**	**1.3**	**1.3**	**1.4**	**22**	<0.20
Fixed Gases by ASTM-D1946 - January 2013																	
Helium	% v/v	5	**0.023**	NS	<0.0050	**0.38**	<0.0050	<0.0050	<0.0050	NS	<0.0066	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.016**
Carbon Dioxide	% v/v	--	**0.0075**	NS	**7.8**	**4.2**	**11**	**8.6**	**11**	NS	**0.024**	**10**	**11**	**6.0**	**25**	**0.041**	**0.0021**
Methane	% v/v	4.4 - 17	<0.0002	NS	**33**	**0.0049**	**0.28**	**19**	**8.4**	NS	**0.0010**	**0.082**	**0.089**	**0.17**	**0.33**	**0.00018**	<0.0002
Nitrogen	% v/v	--	NA	NA	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygen[1]	% v/v	--	**17.6**	NS	**0.32**	**5.7**	**1.5**	**2.0**	**1.8**	NS	**3.7**	**1.3**	**1.3**	**12.6**	**3.5**	NR	NR
Fixed Gases by ASTM-D1946 - June 2013					**0.1**												
Helium	% v/v	5	**0.077**	**0.14**	**0.010**	**0.22**	**0.042**	**0.15**	**0.10**	**0.32**	**0.15**	**0.11**	**0.17**	**0.26**	**0.12**	NA	<0.0050
Carbon Dioxide	% v/v	--	**0.016**	**7.2**	**25**	**5.0**	**17**	**3.9**	**25**	**4.4**	**0.15**	**19**	**20**	**37**	NA	**0.037**	<0.0050
Methane	% v/v	4.4 - 17	**0.00054**	**0.053**	**49**	**0.0017**	**0.037**	**0.0081**	**7.8**	**0.0033**	**0.00052**	**0.037**	**0.030**	**0.24**	**0.24**	**0.00016**	<0.00010
Nitrogen	% v/v	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygen	% v/v	--	**17**	**13**	<0.40	**16**	**3.9**	**16**	**0.72**	**16**	**1.5**	**1.1**	**0.86**	**0.68**	**0.72**	**18**	<0.40

Notes:
v/v = volume over volume ratio
NS = SGMP not sampled due to presence of moisture
NR = not reported by laboratory
NA = not analyzed
Bold indicates detection above method detection limit (MDL).
Detections below laboratory reporting limit (RL) presented with J flag following result value.
Samples collected on June 6 and 7, 2012; January 17 and 18, 2013; and, June 3, 2013.

1 - Oxygen concentration for January 2013 samples were measured with a handheld meter during sampling and not from the sample by ASTM-D1946
Action Levels based on the following:
Lower and Upper Explosion Limit (LEL/UEL) for methane at 25 degrees Celsius.
Acceptable presence of helium (leak-test gas) without compromising sample integrity and representiveness of soil gas, per Cal/EPA Advisory - Active Soil Gas Investigation (April 2012)
Yellow highlight indicates detection above action level.
Grey highlight indicates methane detected above UEL.

Table 3
Sherwin-Williams Emeryville Remediation Project
SELECTED SOIL GAS SAMPLE RESULTS - VOLATILE ORGANIC COMPOUNDS

Chemical	Unit	Action Level	Soil Gas Monitoring Point (SGMP)													Ambient Condition	Trip Blank
			SGMP-01	SGMP-02	SGMP-03	SGMP-04	SGMP-05	SGMP-06	SGMP-07	SGMP-08	SGMP-09	SGMP-10	SGMP-10 Duplicate	SGMP-11	SGMP-12		
Volatile Organic Compounds (VOCs) by TO-15 - June 2012 [1]																	
Benzene	ug/m3	36.2	**18**	**120**	**110**	**350**	**230**	**660**	<2300	**40 J**	**57**	**440**	**460**	**130**	**620**	<0.96	<0.96
Ethylbenzene	ug/m3	420	**2.2**	**37**	**24 J**	**29**	**2.9**	**11000**	<4200	**360**	**8.0**	**29**	**30**	**10**	**31**	<1.7	<1.7
Toluene	ug/m3	135000	**8.4**	**87**	**37**	**92**	**14**	**380 J**	<3600	**4100**	**34**	**99**	**100**	**30**	**100**	**0.74 J**	<1.5
m,p-Xylene	ug/m3	317000	**6.7**	**140**	**96**	**110**	**9.7**	**18000**	<8300	**1400**	**26**	**120**	**120**	**43**	**110**	<3.5	<3.5
o-Xylene	ug/m3	315000	**1.8**	**38**	<42	**35**	**3.4**	**330 J**	<4200	**410**	**8.1**	**40**	**40**	**15**	**38**	<1.7	<1.7
Xylenes, Total	ug/m3	--	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MTBE	ug/m3	4000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	ug/m3	31.9	**16**	<10	<250	**8.4 J**	<10	<2800	<25000	<780	<10	<26	<27	<23	<59	<10	<10
Tetrachloroethene	ug/m3	180	**9.9**	<2.7	<65	<2.7	<2.7	<720	<6500	<200	<2.7	<6.8	<7.1	<6.0	<15	<2.7	<2.7
Trichloroethene	ug/m3	528	<2.1	<2.1	<52	<2.1	<2.1	<570	<5100	<160	<2.1	<5.4	<5.6	<4.8	<12	<2.1	<2.1
cis-1,2-Dichloroethene	ug/m3	15900	<1.6	<1.6	<38	<1.6	<1.6	**410 J**	<3800	<120	<1.6	<4.0	<4.1	<3.5	<8.8	<1.6	<1.6
trans-1,2-Dichloroethene	ug/m3	31900	<1.6	<1.6	<38	<1.6	<1.6	<420	<3800	<120	<1.6	<4.0	<4.1	<3.5	<8.8	<1.6	<1.6
1,2-Dichloroethane	ug/m3	49.6	<3.2	<3.2	<78	<3.2	<3.2	<860	<7700	<240	<3.2	<8.2	<8.5	<7.2	<18	<3.2	<3.2
Vinyl chloride	ug/m3	13.3	<0.51	<0.51	<12	<0.51	<0.51	<140	<1200	<38	<0.51	<1.3	<1.3	**5.5**	<2.9	<0.51	<0.51
Carbon Tetrachloride	ug/m3	25.1	<5.0	<5.0	<120	<5.0	<5.0	<1300	<12000	<370	<5.0	<13	<13	<11	<28	<5.0	<5.0
Trichlorofluoromethane	ug/m3	--	**11**	**41**	<54	**10**	**6.2**	<600	<5400	<170	**2.7**	**57**	**58**	**180**	**11 J**	**1.1 J**	<2.2
Chlorobenzene	ug/m3	--	<1.4	<1.4	<33	<1.4	<1.4	**870**	<3300	**94 J**	<1.4	<3.5	<3.6	<3.0	<7.7	<1.4	<1.4
Chloroform	ug/m3	--	**6.4**	**2.7**	<35	**0.91 J**	**0.70 J**	<390	<3500	<110	**540**	**2.5 J**	**2.6 J**	**2.1 J**	<8.2	<1.5	<1.5
Chloromethane	ug/m3	--	**0.65 J**	**0.64 J**	<40	**0.73 J**	**0.94 J**	<440	<3900	<120	**0.85 J**	**1.2 J**	**1.3 J**	<3.7	<9.2	<1.7	<1.7
Methylene Chloride	ug/m3	--	<1.4	**14**	<33	**6.8**	**0.98 J**	<370	<3300	<100	**12**	**2.4 J**	**2.2 J**	**2.2 J**	**7.6**	<1.4	<1.4
1,2,4-Trimethylbenzene	ug/m3	--	**3.5 J**	**56**	<290	**53**	**3.3 J**	**1900 J**	<29000	**170 J**	**16**	**63**	**61**	**20 J**	**55 J**	<12	<12
1,3,5-Trimethylbenzene	ug/m3	--	<2.0	**22**	<47	**20**	**1.6 J**	**880**	<4700	**110 J**	**5.0**	**20**	**19**	**6.5**	**18**	<2.0	<2.0
2-Hexanone	ug/m3	--	<1.6	<1.6	<39	<1.6	<1.6	<440	**15000**	<120	<1.6	<4.1	<4.3	<3.6	<9.1	<1.6	<1.6
4-Ethyltoluene	ug/m3	--	**2.0**	**47**	<47	**41**	**2.7**	**1400**	<4700	**130 J**	**9.3**	**43**	**43**	**14**	**42**	<2.0	<2.0
Volatile Organic Compounds (VOCs) by TO-15 - January 2013 [2]																	
Benzene	ug/m3	36.2	<6.5	NS	<0.10	<6.5	<6.5	**2700 J**	<0.10	NS	<8.6	<6.5	<6.5	**14**	**25**	**1.3**	<6.5
Ethylbenzene	ug/m3	420	<8.8	NS	**92 J**	<8.8	<8.8	**61000**	**140 J**	NS	<12	<8.8	<8.8	<8.8	<8.8	<0.69	<8.8
Toluene	ug/m3	135000	<7.7	NS	**430 J**	<7.7	<7.7	**2500 J**	**470 J**	NS	<10	<7.7	<7.7	<7.7	<7.7	**3.5**	<7.7
m,p-Xylene	ug/m3	317000	NR	NS	NR	NR	NR	NR	NR	NS	NR	NR	NR	NR	NR	NR	NR
o-Xylene	ug/m3	315000	NR	NS	NR	NR	NR	NR	NR	NS	NR	NR	NR	NR	NR	NR	NR
Xylenes, Total	ug/m3	--	<27	NS	<0.52	<27	<27	**73000**	<0.52	NS	<36	<27	<27	<27	<27	**3.0**	<27
MTBE	ug/m3	4000	<7.3	NS	<0.20	<7.3	<7.3	<1.0	**180 J**	NS	<9.7	<7.3	<7.3	<7.3	<7.3	<0.58	<7.3
Naphthalene	ug/m3	31.9	<11	NS	<0.32	<11	<11	<1.6	<0.32	NS	<15	**11**	<11	**15**	**11**	<8.3	<11
Tetrachloroethene	ug/m3	180	<14	NS	<0.16	<14	<14	<0.82	<0.16	NS	<19	<14	<14	<14	<14	<1.1	<14
Trichloroethene	ug/m3	528	<11	NS	<0.12	<11	<11	<0.60	<0.12	NS	<15	<11	<11	<11	<11	<11	<11
cis-1,2-Dichloroethene	ug/m3	15900	<8.1	NS	<0.10	<8.1	<8.1	**1700 J**	<0.10	NS	<11	<8.1	<8.1	<8.1	<8.1	<0.62	<8.1
trans-1,2-Dichloroethene	ug/m3	31900	<8.1	NS	<0.12	<8.1	<8.1	<0.60	<0.12	NS	<11	<8.1	<8.1	<8.1	<8.1	<0.62	<8.1
1,2-Dichloroethane	ug/m3	49.6	<8.2	NS	<0.18	<8.2	<8.2	<0.90	<0.18	NS	<11	<8.2	<8.2	<8.2	<8.2	<0.64	<8.2
Vinyl chloride	ug/m3	13.3	<5.2	NS	<0.14	<5.2	<5.2	<0.70	<0.14	NS	<6.9	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
Carbon Tetrachloride	ug/m3	25.1	<5.2	NS	<0.14	<5.2	<5.2	<0.70	<0.14	NS	<6.9	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
Trichlorofluoromethane	ug/m3	--	<11	NS	<0.13	<11	<11	<0.78	**160 J**	NS	<15	**17**	**20**	<11	<11	**1.9**	<11
Chlorobenzene	ug/m3	--	<9.4	NS	<0.10	<9.4	<9.4	**2800 J**	<0.10	NS	<12	<9.4	<9.4	<9.4	<9.4	<0.73	<9.4
Chloroform	ug/m3	--	<9.9	NS	<0.13	<9.9	<9.9	<0.64	<0.13	NS	**59**	<9.9	<9.9	<9.9	<9.9	<0.77	<9.9
Chloromethane	ug/m3	--	<4.2	NS	<1.2	<4.2	<4.2	<6.2	<1.2	NS	<5.6	<4.2	<4.2	<4.2	<4.2	<0.33	<4.2
Methylene Chloride	ug/m3	--	<7.1	NS	**190 J**	<7.1	<7.1	<0.52	**270 J**	NS	<9.4	<7.1	<7.1	<7.1	<7.1	**1.4**	<7.1
1,2,4-Trimethylbenzene	ug/m3		<10	NS	**150 J**	<10	<10	**3600 J**	<0.13	NS	<13	<10	<10	<10	<10	<0.78	<10
1,3,5-Trimethylbenzene	ug/m3	--	<10	NS	**86 J**	<10	<10	**3200 J**	**120 J**	NS	<13	<10	<10	<10	<10	<0.78	<10
2-Hexanone	ug/m3	--	<210	NS	<0.88	<210	<210	<4.4	<0.88	NS	<280	<210	<210	<210	<210	<66	<210
4-Ethyltoluene	ug/m3	--	<10	NS	**110 J**	<10	<10	<0.50	**94 J**	NS	<13	<10	<10	<10	<10	<0.78	<10

Table 3
Sherwin-Williams Emeryville Remediation Project
SELECTED SOIL GAS SAMPLE RESULTS - VOLATILE ORGANIC COMPOUNDS

Chemical	Unit	Action Level	Soil Gas Monitoring Point (SGMP)													Ambient Condition	Trip Blank
			SGMP-01	SGMP-02	SGMP-03	SGMP-04	SGMP-05	SGMP-06	SGMP-07	SGMP-08	SGMP-09	SGMP-10	SGMP-10 Duplicate	SGMP-11	SGMP-12		
Volatile Organic Compounds (VOCs) by TO-15 - June 2013 [3]																	
Benzene	ug/m3	36.2	<6.5	<6.5	<520	<6.5	<6.5	<26	<520	<6.5	<6.5	**6.8**	**6.9**	**6.7**	**88**	<6.5	<6.5
Ethylbenzene	ug/m3	420	<8.8	<8.8	<700	<8.8	<8.8	**64**	<700	<8.8	<8.8	<8.8	<8.8	<8.8	<8.8	<8.8	<8.8
Toluene	ug/m3	135000	<7.7	<7.7	<620	<7.7	<7.7	<31	<620	<7.7	<7.7	<7.7	<7.7	<7.7	<7.7	<7.7	<7.7
m,p-Xylene	ug/m3	317000	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
o-Xylene	ug/m3	315000	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Xylenes, Total	ug/m3	--	<27	<27	<2200	<27	<27	<110	<2200	<27	<27	<27	<27	<27	<27	<27	<27
MTBE	ug/m3	4000	<7.3	<7.3	<580	<7.3	<7.3	<29	<580	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3	<7.3
Naphthalene	ug/m3	31.9	<11	**19**	<880	<11	**12**	<44	<880	**76**	<11	**33**	**21**	**46**	**25**	<11	<11
Tetrachloroethene	ug/m3	180	<14	<14	<1100	<14	<14	<56	<1100	<14	<14	<14	<14	<14	<14	<14	<14
Trichloroethene	ug/m3	528	<11	<11	<880	<11	<11	<44	<880	<11	<11	<11	<11	<11	<11	<11	<11
cis-1,2-Dichloroethene	ug/m3	15900	<8.1	<8.1	<650	<8.1	<8.1	<32	<650	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1
trans-1,2-Dichloroethene	ug/m3	31900	<8.1	<8.1	<650	<8.1	<8.1	<32	<650	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1
1,2-Dichloroethane	ug/m3	49.6	<8.2	<8.2	<660	<8.2	<8.2	<33	<660	<8.2	<8.2	<8.2	<8.2	<8.2	<8.2	<8.2	<8.2
Vinyl chloride	ug/m3	13.3	<5.2	<5.2	<420	<5.2	<5.2	<21	<420	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
Carbon Tetrachloride	ug/m3	25.1	<13	<13	<1000	<13	<13	<52	<1000	<13	<13	<13	<13	<13	<13	<13	<13
Trichlorofluoromethane	ug/m3	--	<11	**18**	<880	<11	<11	<44	<880	<11	**29**	**35**	**35**	<11	<11	**1.2 J**	<11
Chlorobenzene	ug/m3	--	<9.4	<9.4	<750	<9.4	<9.4	**56**	<750	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
Chloroform	ug/m3	--	<9.9	<9.9	<790	<9.9	<9.9	<40	<790	<9.9	**370**	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
Chloromethane	ug/m3	--	<4.2	<4.2	<340	<4.2	<4.2	<17	<340	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	**0.70 J**	<4.2
Methylene Chloride	ug/m3	--	<7.1	<7.1	<570	<7.1	<7.1	<28	<570	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	**0.63 J**	<7.1
1,2,4-Trimethylbenzene	ug/m3	--	<10	<10	<800	<10	<10	<40	<800	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	ug/m3	--	<10	<10	<800	<10	<10	**68**	<800	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	ug/m3	--	<210	<210	<17000	<210	<210	<840	<17000	<210	<210	<210	<210	<210	<210	<210	<210
4-Ethyltoluene	ug/m3	--	<10	<10	<800	<10	<10	<40	<800	<10	<10	<10	<10	<10	<10	<10	<10

Notes:

ug/m3 = micrograms per cubic meter
NR = not reported by laboratory
Bold indicates detection above method detection limit (MDL).
Samples collected on June 6 and 7, 2012; January 17 and 18, 2013; and, June 3, 2013.
NS = SGMP not sampled due to presence of moisture
NA = not analyzed
VOCs detected above action levels presented above, along with selected others.
Detections below laboratory reporting limit (RL) presented with J flag following result value.

1 - SGMP-03, -06, -07, and -08 samples from June 2012 have elevated reporting limits due to high organic content; suspected to be elevated methane levels detected in these samples (see Table 2).

2 - SGMP-03, -06, and -07 samples from January 2013 were analyzed for VOCs using EPA Method 8260B because these samples could not be diluted into the TO-15 calibration range.

3 - SGMP-03, -06, and -07 samples from June 2013 have elevated reporting limits due to high organic content; suspected to be elevated methane levels detected in these samples (see Table 2).

Action Levels based on the following:

California Human Health Screening Levels (CHHSLs) for VOCs in soil gas under residential use, where applicable, per Cal/EPA guidance document (January 2005, revised November 2009). Xylenes, Total results compared to lower action level of that for m,p-Xylene and o-Xylene.

Yellow highlight indicates detection above CHHSL under residential use.
Grey highlight indicates reporting limit above CHSSL.
Green highlight indicates detection above CHHSL under industrial/commercial use (122 ug/m3 for benzene and 1400 ug/m3 for ethylbenzene).

Table 4
Sherwin-Williams Emeryville Remediation Project
SELECTED SOIL GAS SAMPLE RESULTS - LOCATION PAIRS

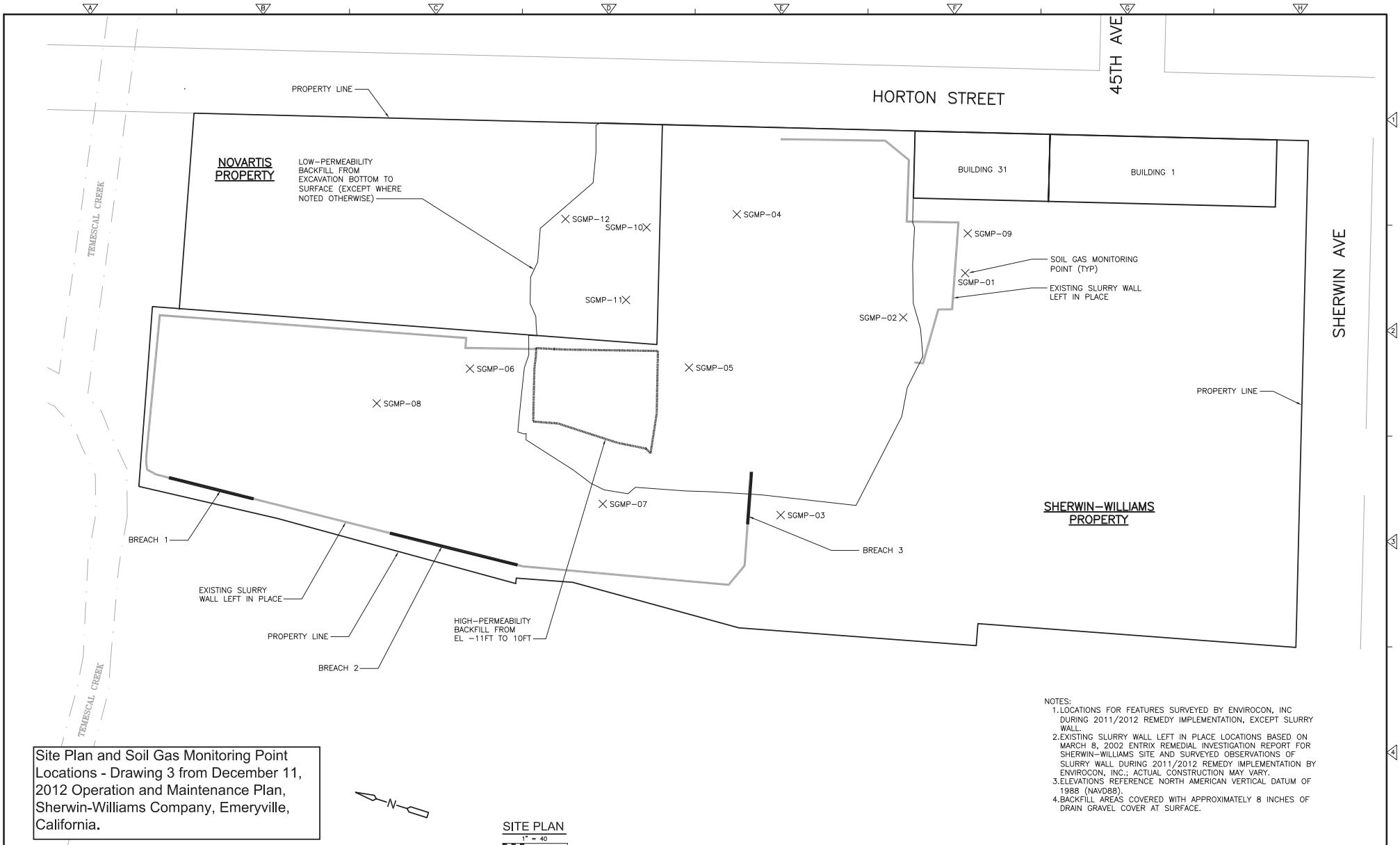
				Soil Gas Sample Location Pairs													
				Within Excavation / Backfill							Outside Excavation					
		Action Levels		Former Rifkin Property			Sherwin-Williams (SW) Property				SW Property, Downgradient of Excavation				SW Property, Near Former UST Area	
Volatile Organic Compounds (VOCs)	Units	Residential	Industrial/ Commercial	CDM-SB56 SGMP-10	CDM-SB58 SGMP-11	CDM-SB65 SGMP-12	CDM-SB73 SGMP-02	CDM-SB74 SGMP-04	CDM-SB67 SGMP-05	CDM-SB60 --	-- SGMP-03	-- SGMP-06	CDM-SB72 SGMP-07	CDM-SB54 SGMP-08	-- SGMP-01	-- SGMP-09
December 2006																
Benzene	ug/m3	36.2	122	**72**	**16000**	**460**	**5.0**	**210**	**340**	**900**	--	--	<9400	<2300	--	--
Ethylbenzene	ug/m3	420	1400	<74	**42000**	**60**	<5.1	**380**	**44**	**1300**	--	--	<13000	<1300	--	--
Naphthalene	ug/m3	31.9	106	<340	<3700	<280	<23	<1000	<61	<660	--	--	<59000	--	--	--
1,2-Dichloroethane	ug/m3	49.6	167	**1000**	<740	<56	<4.7	<210	<12	<130	--	--	<12000	<1200	--	--
June 2012																
Benzene	ug/m3	36.2	122	**460**	**130**	**620**	**120**	**350**	**230**	--	**110**	**660**	<2300	**40 J**	**18**	**57**
Ethylbenzene	ug/m3	420	1400	**30**	**10**	**31**	**37**	**29**	**2.9**	--	**24 J**	**11000**	<4200	**360**	**2.2**	**8.0**
Naphthalene	ug/m3	31.9	106	<26	<27	<23	<10	**8.4 J**	<10	--	<250	<2800	<25000	<780	**16**	<10
1,2-Dichloroethane	ug/m3	49.6	167	<8.2	<7.2	<18	<3.2	<3.2	<3.2	--	<78	<860	<7700	<240	<3.2	<3.2
January 2013																
Benzene	ug/m3	36.2	122	<6.5	**14**	**25**	NS	<6.5	<6.5	--	<0.10	**2700 J**	<0.10	NS	<6.5	<8.6
Ethylbenzene	ug/m3	420	1400	<8.8	<8.8	<8.8	NS	<8.8	<8.8	--	**92 J**	**61000**	**140 J**	NS	<8.8	<12
Naphthalene	ug/m3	31.9	106	**11**	**15**	**11**	NS	<11	<11	--	<0.32	<1.6	<0.32	NS	<11	<11
1,2-Dichloroethane	ug/m3	49.6	167	<8.2	<8.2	<8.2	NS	<8.2	<8.2	--	<0.18	<0.90	<0.18	NS	<8.2	<11
June 2013																
Benzene	ug/m3	36.2	122	**6.9**	**6.7**	**88**	<6.5	<6.5	<6.5	--	<520	<26	<520	<6.5	<6.5	<6.5
Ethylbenzene	ug/m3	420	1400	<8.8	<8.8	<8.8	<8.8	<8.8	<8.8	--	<700	**64**	<700	<8.8	<8.8	<8.8
Naphthalene	ug/m3	31.9	106	**33**	**46**	**25**	**19**	<11	**12**	--	<880	<44	<880	**76**	<11	<11
1,2-Dichloroethane	ug/m3	49.6	167	<8.2	<8.2	<8.2	<8.2	<8.2	<8.2	--	<660	<33	<660	<8.2	<8.2	<8.2

Notes:
CDM-SB series and SGMP pairs are located within 20 feet of each other.
Soil gas samples from temporary borings (CDM-SB series) collected on November 30 and December 19 - 21, 2006.
Soil gas monitoring point (SGMP) samples collected on June 6 and 7, 2012; January 17 and 18, 2013; and, June 3, 2013.
-- = not a cluster pair location (only CDM-SB series or SGMP sample location present)
ug/m3 = micrograms per cubic meter
NS = SGMP not sampled due to presence of moisture
Only those VOCs detected above action levels presented in this table.
Bold indicates detection above method detection limit (MDL).
Detections below laboratory reporting limit (RL) presented with J flag following result value.

Action Levels based on the following:
California Human Health Screening Levels (CHHSLs) for VOCs in soil gas under residential or industrial/commercial use, where applicable, per Cal/EPA guidance document (January 2005, revised November 2009).
Yellow highlight indicates detection above CHHSL under residential use.
Green highlight indicates detection above CHSSL under industrial/commercial.
Grey highlight indicates reporting limit above CHHSL.

Attachment A

Drawings



Site Plan and Soil Gas Monitoring Point Locations - Drawing 3 from December 11, 2012 Operation and Maintenance Plan, Sherwin-Williams Company, Emeryville, California.

N

SITE PLAN
1" = 40
20 0 40

NOTES:
1. LOCATIONS FOR FEATURES SURVEYED BY ENVIROCON, INC DURING 2011/2012 REMEDY IMPLEMENTATION, EXCEPT SLURRY WALL.
2. EXISTING SLURRY WALL LEFT IN PLACE LOCATIONS BASED ON MARCH 8, 2002 ENTRIX REMEDIAL INVESTIGATION REPORT FOR SHERWIN-WILLIAMS SITE AND SURVEYED OBSERVATIONS OF SLURRY WALL DURING 2011/2012 REMEDY IMPLEMENTATION BY ENVIROCON, INC.; ACTUAL CONSTRUCTION MAY VARY.
3. ELEVATIONS REFERENCE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4. BACKFILL AREAS COVERED WITH APPROXIMATELY 8 INCHES OF DRAIN GRAVEL COVER AT SURFACE.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: x
DRAWN BY: x
SHEET CHK'D BY: x
CROSS CHK'D BY: x
APPROVED BY:
DATE: MARCH 2013

CDM Smith
100 Pringle Avenue, Suite 300
Walnut Creek, CA 94596
Tel: (925) 933-2900

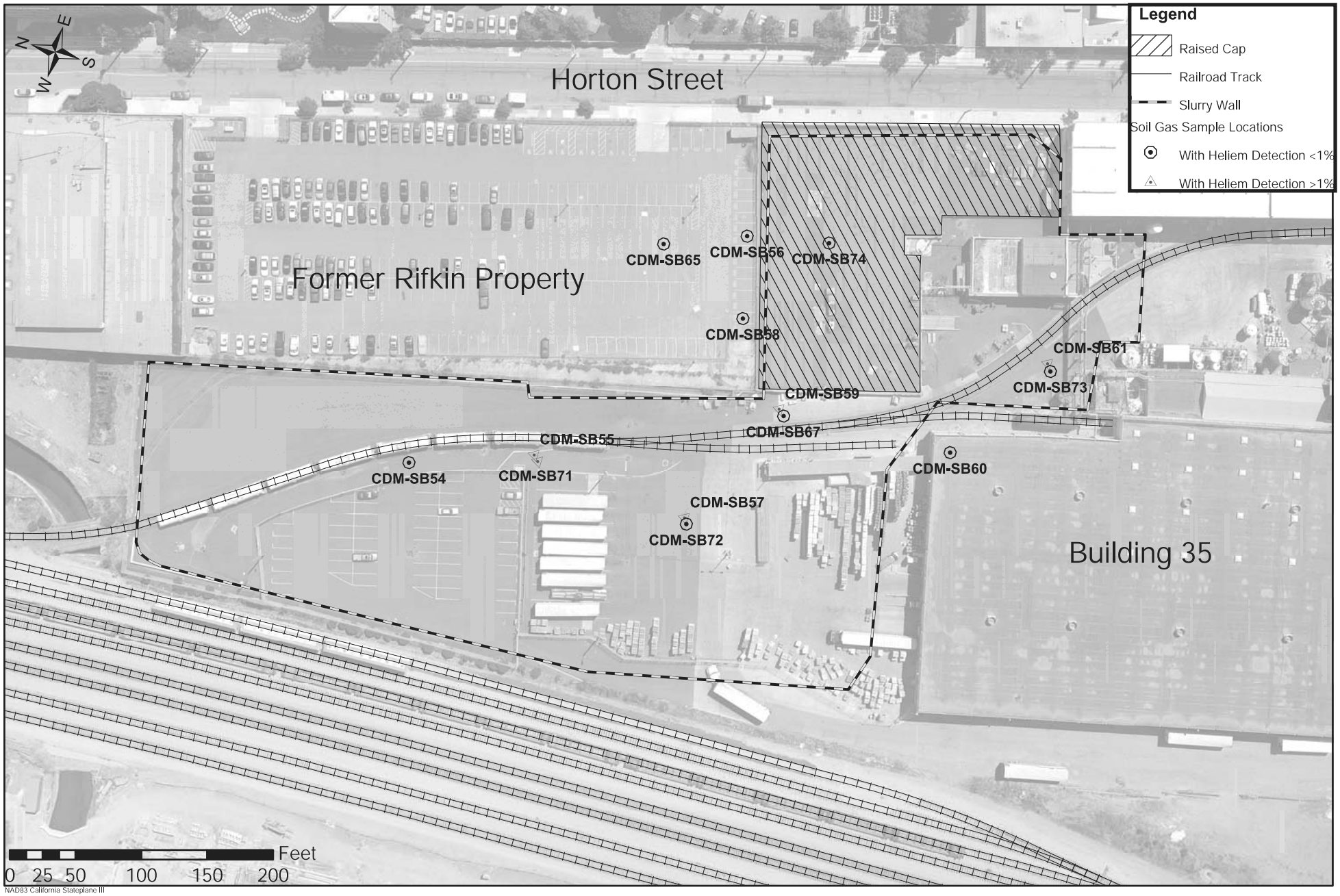
VERIFY SCALE
THIS BAR IS ONE INCH LONG AT FULL SCALE

SHERWIN-WILLIAMS COMPANY
SITE REMEDIATION
EMERYVILLE, CALIFORNIA

SOIL GAS MONITORING POINTS

PROJECT NO. 13452-81494
FILE NAME: sw ca-built1a.dwg
SHEET NO. 3

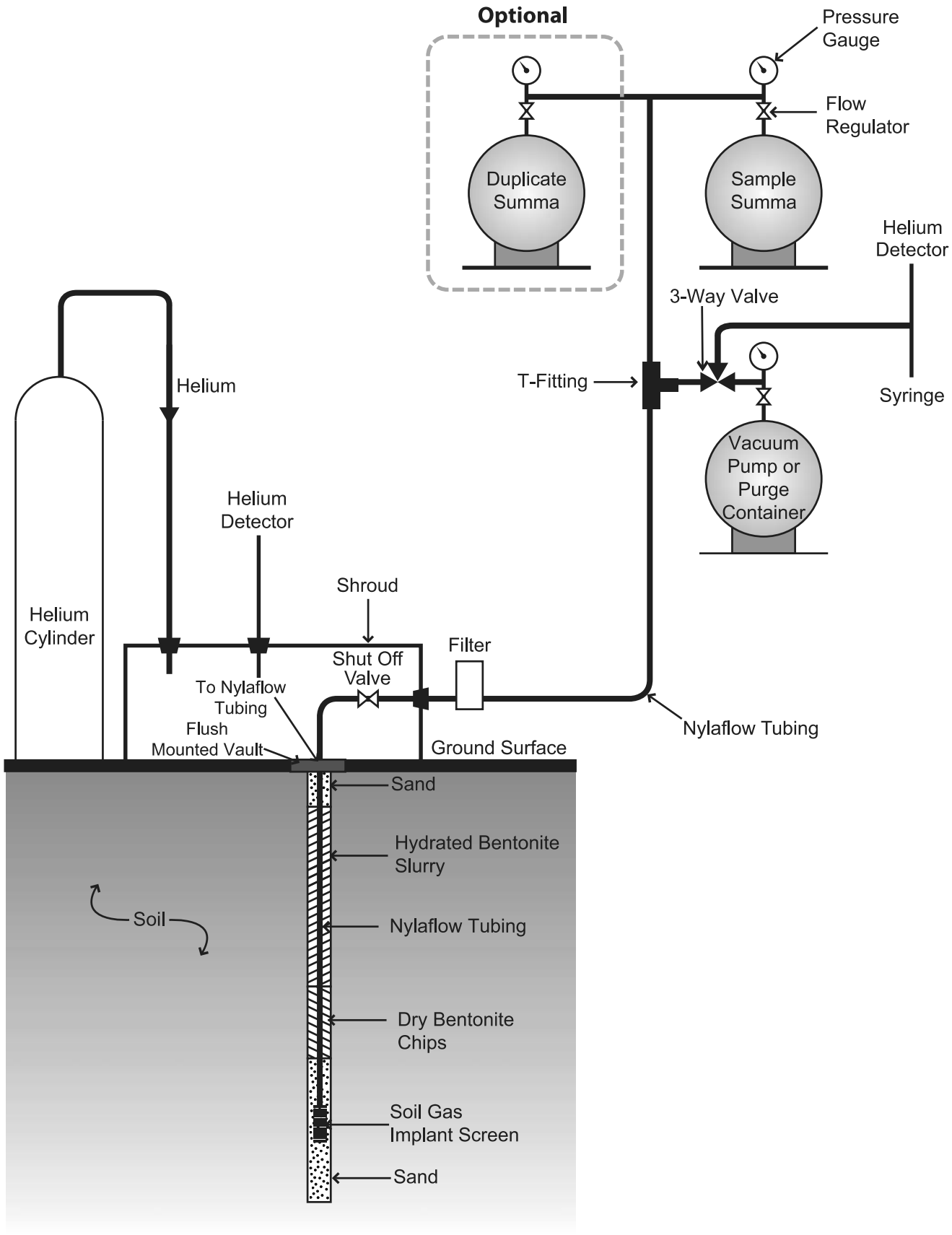
P:\13452 Sherwin-Williams\81494 Emeryville\Completion Report\CAD\ figure 3-SOIL GAS MONITORING 2013 03/13/13 13:33 TalbotWK XREFS: CDM_2234, swexutil, swextopo, swebndy, XR-SLRY-WALL, WELLS, (2011-04-14)SW topo, sh01 Edited topo, ACAD-WEI
© CDM SMITH ALL RIGHTS RESERVED.
REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM SMITH AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.



November . December 2006 Soil Gas Sample Locations From CDM letter report dated January 18, 2007.

CDM

Figure 1
Soil Gas Sample Locations
Sherwin-Williams, Emeryville, California



K:\GIS\13452_Sherwin-Williams\69712\OriginalData\Figure11-2_Soil Gas Sampling Schematic.ai 05/13/11 KAS

Figure D-1 from December 11, 2012 Operation and Maintenance Plan, Sherwin-Williams Company, Emeryville, California.

Figure D-1
Soil Gas Sampling Schematic
Sherwin-Williams Company - Emeryville, California

Attachment B

Laboratory Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Costa Mesa
3585 Cadillac Ave
Suite A
Costa Mesa, CA 92626
Tel: (714)258-8610

TestAmerica Job ID: 340-2373-1
Client Project/Site: Sherwin Williams
Revision: 1

For:
CDM Smith, Inc.
100 Pringle Avenue
Suite 300
Walnut Creek, California 94596

Attn: Pawan Sharma

Marisol Tabirara

Authorized for release by:
7/2/2012 6:33:58 PM
Marisol (Sonia) Tabirara
Project Manager I
sonia.tabirara@testamericainc.com

Designee for

Beth Riley
Customer Service Manager
beth.riley@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 16
Surrogate Summary 58
QC Sample Results 59
QC Association Summary 84
Lab Chronicle 86
Certification Summary 90
Method Summary 91
Sample Summary 92
Chain of Custody 93
Receipt Checklists 96
Field Data Sheets 97
Clean Canister Certification 111
Pre-Ship Certification 111
Clean Canister Data 117

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Job ID: 340-2373-1

Laboratory: TestAmerica Costa Mesa

Narrative

Job Narrative
340-2373-1

This report has been revised to include Naphthalene, client request.

Receipt
The samples were received on 6/9/2012 9:00 AM; the samples arrived in good condition.

Air - GC VOA
No analytical or quality issues were noted.

Air - GC/MS VOA
Method(s) TO-15: The continuing calibration verification (CCV) for Bromoform (32%D) associated with batch 1873 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) TO-15: Surrogate recovery for the following sample(s) was outside control limits: SGMP-03-20120606 (340-2373-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) TO-15: The following sample(s) was diluted due to the abundance of non-target analytes: SGMP-06-20120606 (340-2373-5), SGMP-07-20120606 (340-2373-6), SGMP-08-20120606 (340-2373-7). Elevated reporting limits (RLs) are provided.

A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes per QC batch to recover outside criteria for this method when a full list spike is utilized. The following analytes associated with the following batches were outside control limits but within the marginal exceedence limits. The RPDs were also within the acceptable limits. The results for bromoform may be biased high.

QC Batch 1863
LCS Bromoform 132% (within marginal exceedence 70-150%)
LCSD Bromoform 135% (within marginal exceedence 70-150%) RPD 2

QC Batch 1873
LCS Bromoform 138% (within marginal exceedence 70-150%)
LCSD Bromoform 143% (within marginal exceedence 70-150%) RPD4

No other analytical or quality issues were noted.

Client Sample ID: SGMP-02-20120606 — Lab Sample ID: 340-2373-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	7.9		0.020	0.0040	% v/v	1.99		D1946	Total/NA
Helium	0.38		0.040	0.020	% v/v	1.99		D1946	Total/NA
Methane (FID)	0.00052		0.00040	0.00012	% v/v	1.99		D1946	Total/NA
Nitrogen	80		2.0	1.0	% v/v	1.99		D1946	Total/NA
Oxygen	7.1		0.40	0.060	% v/v	1.99		D1946	Total/NA
Acetone	9.2		0.80	0.30	ppb v/v	1		TO-15	Total/NA
Benzene	39		0.74	0.37	ppb v/v	2.47		TO-15	Total/NA
2-Butanone (MEK)	1.9		0.80	0.40	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	8.6		0.80	0.20	ppb v/v	1		TO-15	Total/NA
Chloroform	0.55		0.30	0.10	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.31	J	0.80	0.20	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.48		0.40	0.15	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	8.6		0.40	0.15	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	9.5		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Methylene chloride	4.1		0.40	0.20	ppb v/v	1		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	5.9		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Toluene	23		0.40	0.20	ppb v/v	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.28	J	0.30	0.15	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	7.3		0.40	0.15	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	11		2.5	0.25	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	4.5		0.40	0.25	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	31		0.80	0.20	ppb v/v	1		TO-15	Total/NA
o-Xylene	8.8		0.40	0.20	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	79000		200	40	ppm v/v	1.99		D1946	Total/NA
Helium	3800		400	200	ppm v/v	1.99		D1946	Total/NA
Methane (FID)	5.2		4.0	1.2	ppm v/v	1.99		D1946	Total/NA
Nitrogen	800000		20000	10000	ppm v/v	1.99		D1946	Total/NA
Oxygen	71000		4000	600	ppm v/v	1.99		D1946	Total/NA
Acetone	22		1.9	0.71	ug/m3	1		TO-15	Total/NA
Benzene	120		2.4	1.2	ug/m3	2.47		TO-15	Total/NA
2-Butanone (MEK)	5.7		2.4	1.2	ug/m3	1		TO-15	Total/NA
Carbon disulfide	27		2.5	0.62	ug/m3	1		TO-15	Total/NA
Chloroform	2.7		1.5	0.49	ug/m3	1		TO-15	Total/NA
Chloromethane	0.64	J	1.7	0.41	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.4		2.0	0.74	ug/m3	1		TO-15	Total/NA
Ethylbenzene	37		1.7	0.65	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	47		2.0	0.98	ug/m3	1		TO-15	Total/NA
Methylene chloride	14		1.4	0.69	ug/m3	1		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	24		1.6	0.82	ug/m3	1		TO-15	Total/NA
Toluene	87		1.5	0.75	ug/m3	1		TO-15	Total/NA
1,1,1-Trichloroethane	1.5	J	1.6	0.82	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	41		2.2	0.84	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	56		12	1.2	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	22		2.0	1.2	ug/m3	1		TO-15	Total/NA
m,p-Xylene	140		3.5	0.87	ug/m3	1		TO-15	Total/NA
o-Xylene	38		1.7	0.87	ug/m3	1		TO-15	Total/NA

Client Sample ID: SGMP-03-20120606 — Lab Sample ID: 340-2373-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	25		0.019	0.0038	% v/v	1.92		D1946	Total/NA
Methane (TCD)	40		0.00038	0.00012	% v/v	1.92		D1946	Total/NA

Client Sample ID: SGMP-03-20120606 (Continued) — Lab Sample ID: 340-2373-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen	33		1.9	0.96	% v/v	1.92		D1946	Total/NA
Oxygen	0.94		0.38	0.058	% v/v	1.92		D1946	Total/NA
Benzene	35		7.2	3.6	ppb v/v	24		TO-15	Total/NA
Ethylbenzene	5.4	J	9.6	3.6	ppb v/v	24		TO-15	Total/NA
Toluene	9.7		9.6	4.8	ppb v/v	24		TO-15	Total/NA
m,p-Xylene	22		19	4.8	ppb v/v	24		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	250000		190	38	ppm v/v	1.92		D1946	Total/NA
Methane (TCD)	400000		3.8	1.2	ppm v/v	1.92		D1946	Total/NA
Nitrogen	330000		19000	9600	ppm v/v	1.92		D1946	Total/NA
Oxygen	9400		3800	580	ppm v/v	1.92		D1946	Total/NA
Benzene	110		23	12	ug/m3	24		TO-15	Total/NA
Ethylbenzene	24	J	42	16	ug/m3	24		TO-15	Total/NA
Toluene	37		36	18	ug/m3	24		TO-15	Total/NA
m,p-Xylene	96		83	21	ug/m3	24		TO-15	Total/NA

Client Sample ID: SGMP-04-20120606 — Lab Sample ID: 340-2373-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	7.1		0.020	0.0041	% v/v	2.03		D1946	Total/NA
Methane (FID)	0.047		0.00041	0.00012	% v/v	2.03		D1946	Total/NA
Nitrogen	87		2.0	1.0	% v/v	2.03		D1946	Total/NA
Oxygen	1.7		0.41	0.061	% v/v	2.03		D1946	Total/NA
Acetone	15		0.80	0.30	ppb v/v	1		TO-15	Total/NA
Benzene	110		1.7	0.87	ppb v/v	5.77		TO-15	Total/NA
2-Butanone (MEK)	3.9		0.80	0.40	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	1.5		0.80	0.20	ppb v/v	1		TO-15	Total/NA
Chloroform	0.19	J	0.30	0.10	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.35	J	0.80	0.20	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.56		0.40	0.15	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	6.8		0.40	0.15	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	8.4		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Methylene chloride	1.9		0.40	0.20	ppb v/v	1		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	9.7		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Toluene	25		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	1.9		0.40	0.15	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	11		2.5	0.25	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	4.0		0.40	0.25	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	25		0.80	0.20	ppb v/v	1		TO-15	Total/NA
o-Xylene	8.0		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Naphthalene	1.6	J	2.0	0.80	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	71000		200	41	ppm v/v	2.03		D1946	Total/NA
Methane (FID)	470		4.1	1.2	ppm v/v	2.03		D1946	Total/NA
Nitrogen	870000		20000	10000	ppm v/v	2.03		D1946	Total/NA
Oxygen	17000		4100	610	ppm v/v	2.03		D1946	Total/NA
Acetone	36		1.9	0.71	ug/m3	1		TO-15	Total/NA
Benzene	350		5.5	2.8	ug/m3	5.77		TO-15	Total/NA
2-Butanone (MEK)	11		2.4	1.2	ug/m3	1		TO-15	Total/NA
Carbon disulfide	4.6		2.5	0.62	ug/m3	1		TO-15	Total/NA
Chloroform	0.91	J	1.5	0.49	ug/m3	1		TO-15	Total/NA
Chloromethane	0.73	J	1.7	0.41	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.7		2.0	0.74	ug/m3	1		TO-15	Total/NA

Client Sample ID: SGMP-04-20120606 (Continued) — Lab Sample ID: 340-2373-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	29		1.7	0.65	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	41		2.0	0.98	ug/m3	1		TO-15	Total/NA
Methylene chloride	6.8		1.4	0.69	ug/m3	1		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	40		1.6	0.82	ug/m3	1		TO-15	Total/NA
Toluene	92		1.5	0.75	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	10		2.2	0.84	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	53		12	1.2	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	20		2.0	1.2	ug/m3	1		TO-15	Total/NA
m,p-Xylene	110		3.5	0.87	ug/m3	1		TO-15	Total/NA
o-Xylene	35		1.7	0.87	ug/m3	1		TO-15	Total/NA
Naphthalene	8.4	J	10	4.2	ug/m3	1		TO-15	Total/NA

Client Sample ID: SGMP-05-20120606 — Lab Sample ID: 340-2373-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	7.3		0.020	0.0041	% v/v	2.03		D1946	Total/NA
Methane (FID)	0.38		0.00041	0.00012	% v/v	2.03		D1946	Total/NA
Nitrogen	87		2.0	1.0	% v/v	2.03		D1946	Total/NA
Oxygen	1.2		0.41	0.061	% v/v	2.03		D1946	Total/NA
Acetone	12		0.80	0.30	ppb v/v	1		TO-15	Total/NA
Benzene	72		0.78	0.39	ppb v/v	2.61		TO-15	Total/NA
2-Butanone (MEK)	2.7		0.80	0.40	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	1.0		0.80	0.20	ppb v/v	1		TO-15	Total/NA
Chloroform	0.14	J	0.30	0.10	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.46	J	0.80	0.20	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.67		0.40	0.15	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.68		0.40	0.15	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	0.54		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Methylene chloride	0.28	J	0.40	0.20	ppb v/v	1		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	3.7		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Toluene	3.7		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	1.1		0.40	0.15	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.67	J	2.5	0.25	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.32	J	0.40	0.25	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	2.2		0.80	0.20	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.78		0.40	0.20	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	73000		200	41	ppm v/v	2.03		D1946	Total/NA
Methane (FID)	3800		4.1	1.2	ppm v/v	2.03		D1946	Total/NA
Nitrogen	870000		20000	10000	ppm v/v	2.03		D1946	Total/NA
Oxygen	12000		4100	610	ppm v/v	2.03		D1946	Total/NA
Acetone	29		1.9	0.71	ug/m3	1		TO-15	Total/NA
Benzene	230		2.5	1.3	ug/m3	2.61		TO-15	Total/NA
2-Butanone (MEK)	7.9		2.4	1.2	ug/m3	1		TO-15	Total/NA
Carbon disulfide	3.3		2.5	0.62	ug/m3	1		TO-15	Total/NA
Chloroform	0.70	J	1.5	0.49	ug/m3	1		TO-15	Total/NA
Chloromethane	0.94	J	1.7	0.41	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	3.3		2.0	0.74	ug/m3	1		TO-15	Total/NA
Ethylbenzene	2.9		1.7	0.65	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	2.7		2.0	0.98	ug/m3	1		TO-15	Total/NA
Methylene chloride	0.98	J	1.4	0.69	ug/m3	1		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	15		1.6	0.82	ug/m3	1		TO-15	Total/NA
Toluene	14		1.5	0.75	ug/m3	1		TO-15	Total/NA

Client Sample ID: SGMP-05-20120606 (Continued) — Lab Sample ID: 340-2373-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichlorofluoromethane	6.2		2.2	0.84	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	3.3	J	12	1.2	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	1.6	J	2.0	1.2	ug/m3	1		TO-15	Total/NA
m,p-Xylene	9.7		3.5	0.87	ug/m3	1		TO-15	Total/NA
o-Xylene	3.4		1.7	0.87	ug/m3	1		TO-15	Total/NA

Client Sample ID: SGMP-06-20120606 — Lab Sample ID: 340-2373-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	8.0		0.021	0.0043	% v/v	2.13		D1946	Total/NA
Methane (TCD)	3.8		0.00043	0.00013	% v/v	2.13		D1946	Total/NA
Nitrogen	81		2.1	1.1	% v/v	2.13		D1946	Total/NA
Oxygen	2.2		0.43	0.064	% v/v	2.13		D1946	Total/NA
Benzene	210		80	40	ppb v/v	267		TO-15	Total/NA
Chlorobenzene	190		80	27	ppb v/v	267		TO-15	Total/NA
cis-1,2-Dichloroethene	100	J	110	53	ppb v/v	267		TO-15	Total/NA
Ethylbenzene	2600		110	40	ppb v/v	267		TO-15	Total/NA
4-Ethyltoluene	290		110	53	ppb v/v	267		TO-15	Total/NA
Toluene	100	J	110	53	ppb v/v	267		TO-15	Total/NA
1,2,4-Trimethylbenzene	390	J	670	67	ppb v/v	267		TO-15	Total/NA
1,3,5-Trimethylbenzene	180		110	67	ppb v/v	267		TO-15	Total/NA
m,p-Xylene	4100		210	53	ppb v/v	267		TO-15	Total/NA
o-Xylene	75	J	110	53	ppb v/v	267		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	80000		210	43	ppm v/v	2.13		D1946	Total/NA
Methane (TCD)	38000		4.3	1.3	ppm v/v	2.13		D1946	Total/NA
Nitrogen	810000		21000	11000	ppm v/v	2.13		D1946	Total/NA
Oxygen	22000		4300	640	ppm v/v	2.13		D1946	Total/NA
Benzene	660		260	130	ug/m3	267		TO-15	Total/NA
Chlorobenzene	870		370	120	ug/m3	267		TO-15	Total/NA
cis-1,2-Dichloroethene	410	J	420	210	ug/m3	267		TO-15	Total/NA
Ethylbenzene	11000		460	170	ug/m3	267		TO-15	Total/NA
4-Ethyltoluene	1400		530	260	ug/m3	267		TO-15	Total/NA
Toluene	380	J	400	200	ug/m3	267		TO-15	Total/NA
1,2,4-Trimethylbenzene	1900	J	3300	330	ug/m3	267		TO-15	Total/NA
1,3,5-Trimethylbenzene	880		530	330	ug/m3	267		TO-15	Total/NA
m,p-Xylene	18000		930	230	ug/m3	267		TO-15	Total/NA
o-Xylene	330	J	460	230	ug/m3	267		TO-15	Total/NA

Client Sample ID: SGMP-07-20120606 — Lab Sample ID: 340-2373-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	18		0.020	0.0040	% v/v	1.98		D1946	Total/NA
Methane (TCD)	12		0.00040	0.00012	% v/v	1.98		D1946	Total/NA
Nitrogen	66		2.0	0.99	% v/v	1.98		D1946	Total/NA
Oxygen	1.1		0.40	0.059	% v/v	1.98		D1946	Total/NA
2-Hexanone	3700		960	600	ppb v/v	2390		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	180000		200	40	ppm v/v	1.98		D1946	Total/NA
Methane (TCD)	120000		4.0	1.2	ppm v/v	1.98		D1946	Total/NA
Nitrogen	660000		20000	9900	ppm v/v	1.98		D1946	Total/NA
Oxygen	11000		4000	590	ppm v/v	1.98		D1946	Total/NA
2-Hexanone	15000		3900	2400	ug/m3	2390		TO-15	Total/NA

Client Sample ID: SGMP-08-20120606 — Lab Sample ID: 340-2373-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (FID)	0.070		0.021	0.0041	% v/v	2.06		D1946	Total/NA
Helium	0.050		0.041	0.021	% v/v	2.06		D1946	Total/NA
Methane (FID)	0.34		0.00041	0.00012	% v/v	2.06		D1946	Total/NA
Nitrogen	86		2.1	1.0	% v/v	2.06		D1946	Total/NA
Oxygen	10		0.41	0.062	% v/v	2.06		D1946	Total/NA
Acetone	100		59	22	ppb v/v	74		TO-15	Total/NA
Benzene	13	J	22	11	ppb v/v	74		TO-15	Total/NA
Carbon disulfide	41	J	59	15	ppb v/v	74		TO-15	Total/NA
Chlorobenzene	20	J	22	7.4	ppb v/v	74		TO-15	Total/NA
Ethylbenzene	84		30	11	ppb v/v	74		TO-15	Total/NA
4-Ethyltoluene	26	J	30	15	ppb v/v	74		TO-15	Total/NA
Toluene	1100		30	15	ppb v/v	74		TO-15	Total/NA
1,2,4-Trimethylbenzene	34	J	190	19	ppb v/v	74		TO-15	Total/NA
1,3,5-Trimethylbenzene	23	J	30	19	ppb v/v	74		TO-15	Total/NA
m,p-Xylene	320		59	15	ppb v/v	74		TO-15	Total/NA
o-Xylene	95		30	15	ppb v/v	74		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (FID)	700		210	41	ppm v/v	2.06		D1946	Total/NA
Helium	500		410	210	ppm v/v	2.06		D1946	Total/NA
Methane (FID)	3400		4.1	1.2	ppm v/v	2.06		D1946	Total/NA
Nitrogen	860000		21000	10000	ppm v/v	2.06		D1946	Total/NA
Oxygen	100000		4100	620	ppm v/v	2.06		D1946	Total/NA
Acetone	250		140	53	ug/m3	74		TO-15	Total/NA
Benzene	40	J	71	35	ug/m3	74		TO-15	Total/NA
Carbon disulfide	130	J	180	46	ug/m3	74		TO-15	Total/NA
Chlorobenzene	94	J	100	34	ug/m3	74		TO-15	Total/NA
Ethylbenzene	360		130	48	ug/m3	74		TO-15	Total/NA
4-Ethyltoluene	130	J	150	73	ug/m3	74		TO-15	Total/NA
Toluene	4100		110	56	ug/m3	74		TO-15	Total/NA
1,2,4-Trimethylbenzene	170	J	910	91	ug/m3	74		TO-15	Total/NA
1,3,5-Trimethylbenzene	110	J	150	91	ug/m3	74		TO-15	Total/NA
m,p-Xylene	1400		260	64	ug/m3	74		TO-15	Total/NA
o-Xylene	410		130	64	ug/m3	74		TO-15	Total/NA

Client Sample ID: SGMP-09-20120607 — Lab Sample ID: 340-2373-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (FID)	0.071		0.021	0.0041	% v/v	2.06		D1946	Total/NA
Helium	0.51		0.041	0.021	% v/v	2.06		D1946	Total/NA
Methane (FID)	0.00096		0.00041	0.00012	% v/v	2.06		D1946	Total/NA
Nitrogen	75		2.1	1.0	% v/v	2.06		D1946	Total/NA
Oxygen	20		0.41	0.062	% v/v	2.06		D1946	Total/NA
Acetone	27		0.80	0.30	ppb v/v	1		TO-15	Total/NA
Benzene	18		0.30	0.15	ppb v/v	1		TO-15	Total/NA
Bromodichloromethane	0.23	J	0.30	0.15	ppb v/v	1		TO-15	Total/NA
2-Butanone (MEK)	6.9		0.80	0.40	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	14		0.80	0.20	ppb v/v	1		TO-15	Total/NA
Chloroethane	0.45	J	0.80	0.20	ppb v/v	1		TO-15	Total/NA
Chloroform	110		1.7	0.57	ppb v/v	5.67		TO-15	Total/NA
Chloromethane	0.41	J	0.80	0.20	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.52		0.40	0.15	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	1.8		0.40	0.15	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	1.9		0.40	0.20	ppb v/v	1		TO-15	Total/NA

Client Sample ID: SGMP-09-20120607 (Continued)

Lab Sample ID: 340-2373-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene chloride	3.4		0.40	0.20	ppb v/v	1		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	3.7		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Toluene	9.1		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.48		0.40	0.15	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	3.2		2.5	0.25	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	1.0		0.40	0.25	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	6.1		0.80	0.20	ppb v/v	1		TO-15	Total/NA
o-Xylene	1.9		0.40	0.20	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (FID)	710		210	41	ppm v/v	2.06		D1946	Total/NA
Helium	5100		410	210	ppm v/v	2.06		D1946	Total/NA
Methane (FID)	9.6		4.1	1.2	ppm v/v	2.06		D1946	Total/NA
Nitrogen	750000		21000	10000	ppm v/v	2.06		D1946	Total/NA
Oxygen	200000		4100	620	ppm v/v	2.06		D1946	Total/NA
Acetone	65		1.9	0.71	ug/m3	1		TO-15	Total/NA
Benzene	57		0.96	0.48	ug/m3	1		TO-15	Total/NA
Bromodichloromethane	1.5	J	2.0	1.0	ug/m3	1		TO-15	Total/NA
2-Butanone (MEK)	20		2.4	1.2	ug/m3	1		TO-15	Total/NA
Carbon disulfide	44		2.5	0.62	ug/m3	1		TO-15	Total/NA
Chloroethane	1.2	J	2.1	0.53	ug/m3	1		TO-15	Total/NA
Chloroform	540		8.3	2.8	ug/m3	5.67		TO-15	Total/NA
Chloromethane	0.85	J	1.7	0.41	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.6		2.0	0.74	ug/m3	1		TO-15	Total/NA
Ethylbenzene	8.0		1.7	0.65	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	9.3		2.0	0.98	ug/m3	1		TO-15	Total/NA
Methylene chloride	12		1.4	0.69	ug/m3	1		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	15		1.6	0.82	ug/m3	1		TO-15	Total/NA
Toluene	34		1.5	0.75	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	2.7		2.2	0.84	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	16		12	1.2	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	5.0		2.0	1.2	ug/m3	1		TO-15	Total/NA
m,p-Xylene	26		3.5	0.87	ug/m3	1		TO-15	Total/NA
o-Xylene	8.1		1.7	0.87	ug/m3	1		TO-15	Total/NA

Client Sample ID: SGMP-01-20120607

Lab Sample ID: 340-2373-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (FID)	0.015	J	0.020	0.0039	% v/v	1.95		D1946	Total/NA
Methane (FID)	0.00026	J	0.00039	0.00012	% v/v	1.95		D1946	Total/NA
Nitrogen	77		2.0	0.98	% v/v	1.95		D1946	Total/NA
Oxygen	19		0.39	0.059	% v/v	1.95		D1946	Total/NA
Acetone	18		0.80	0.30	ppb v/v	1		TO-15	Total/NA
Benzene	5.7		0.30	0.15	ppb v/v	1		TO-15	Total/NA
2-Butanone (MEK)	3.7		0.80	0.40	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	1.8		0.80	0.20	ppb v/v	1		TO-15	Total/NA
Chloroform	1.3		0.30	0.10	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.31	J	0.80	0.20	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.57		0.40	0.15	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.50		0.40	0.15	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	0.41		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	1.5		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Toluene	2.2		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	2.0		0.40	0.15	ppb v/v	1		TO-15	Total/NA

Client Sample ID: SGMP-01-20120607 (Continued)

Lab Sample ID: 340-2373-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	0.22	J	0.40	0.20	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.71	J	2.5	0.25	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	1.6		0.80	0.20	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.42		0.40	0.20	ppb v/v	1		TO-15	Total/NA
Naphthalene	3.0		2.0	0.80	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (FID)	150	J	200	39	ppm v/v	1.95		D1946	Total/NA
Methane (FID)	2.6	J	3.9	1.2	ppm v/v	1.95		D1946	Total/NA
Nitrogen	770000		20000	9800	ppm v/v	1.95		D1946	Total/NA
Oxygen	190000		3900	590	ppm v/v	1.95		D1946	Total/NA
Acetone	44		1.9	0.71	ug/m3	1		TO-15	Total/NA
Benzene	18		0.96	0.48	ug/m3	1		TO-15	Total/NA
2-Butanone (MEK)	11		2.4	1.2	ug/m3	1		TO-15	Total/NA
Carbon disulfide	5.7		2.5	0.62	ug/m3	1		TO-15	Total/NA
Chloroform	6.4		1.5	0.49	ug/m3	1		TO-15	Total/NA
Chloromethane	0.65	J	1.7	0.41	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.8		2.0	0.74	ug/m3	1		TO-15	Total/NA
Ethylbenzene	2.2		1.7	0.65	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	2.0		2.0	0.98	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	9.9		2.7	1.4	ug/m3	1		TO-15	Total/NA
Toluene	8.4		1.5	0.75	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	11		2.2	0.84	ug/m3	1		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	1.7	J	3.1	1.5	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	3.5	J	12	1.2	ug/m3	1		TO-15	Total/NA
m,p-Xylene	6.7		3.5	0.87	ug/m3	1		TO-15	Total/NA
o-Xylene	1.8		1.7	0.87	ug/m3	1		TO-15	Total/NA
Naphthalene	16		10	4.2	ug/m3	1		TO-15	Total/NA

Client Sample ID: TB-20120607

Lab Sample ID: 340-2373-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane (FID)	0.00014	J	0.00020	0.000060	% v/v	1		D1946	Total/NA
Nitrogen	97		1.0	0.50	% v/v	1		D1946	Total/NA
2-Butanone (MEK)	0.42	J	0.80	0.40	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane (FID)	1.4	J	2.0	0.60	ppm v/v	1		D1946	Total/NA
Nitrogen	970000		10000	5000	ppm v/v	1		D1946	Total/NA
2-Butanone (MEK)	1.2	J	2.4	1.2	ug/m3	1		TO-15	Total/NA

Client Sample ID: SGMP-10-20120607

Lab Sample ID: 340-2373-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	18		0.020	0.0040	% v/v	2.01		D1946	Total/NA
Methane (FID)	0.19		0.00040	0.00012	% v/v	2.01		D1946	Total/NA
Nitrogen	77		2.0	1.0	% v/v	2.01		D1946	Total/NA
Oxygen	1.7		0.40	0.060	% v/v	2.01		D1946	Total/NA
Acetone	24		2.0	0.76	ppb v/v	2.52		TO-15	Total/NA
Benzene	140		0.76	0.38	ppb v/v	2.52		TO-15	Total/NA
2-Butanone (MEK)	4.6		2.0	1.0	ppb v/v	2.52		TO-15	Total/NA
Carbon disulfide	4.6		2.0	0.50	ppb v/v	2.52		TO-15	Total/NA
Chloroform	0.51	J	0.76	0.25	ppb v/v	2.52		TO-15	Total/NA
Chloromethane	0.56	J	2.0	0.50	ppb v/v	2.52		TO-15	Total/NA
Dichlorodifluoromethane	0.75	J	1.0	0.38	ppb v/v	2.52		TO-15	Total/NA

Client Sample ID: SGMP-10-20120607 (Continued) — Lab Sample ID: 340-2373-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	6.7		1.0	0.38	ppb v/v	2.52		TO-15	Total/NA
4-Ethyltoluene	8.7		1.0	0.50	ppb v/v	2.52		TO-15	Total/NA
Methylene chloride	0.68	J	1.0	0.50	ppb v/v	2.52		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	7.2		1.0	0.50	ppb v/v	2.52		TO-15	Total/NA
Toluene	26		1.0	0.50	ppb v/v	2.52		TO-15	Total/NA
Trichlorofluoromethane	10		1.0	0.38	ppb v/v	2.52		TO-15	Total/NA
1,2,4-Trimethylbenzene	13		6.3	0.63	ppb v/v	2.52		TO-15	Total/NA
1,3,5-Trimethylbenzene	4.1		1.0	0.63	ppb v/v	2.52		TO-15	Total/NA
m,p-Xylene	27		2.0	0.50	ppb v/v	2.52		TO-15	Total/NA
o-Xylene	9.1		1.0	0.50	ppb v/v	2.52		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	180000		200	40	ppm v/v	2.01		D1946	Total/NA
Methane (FID)	1900		4.0	1.2	ppm v/v	2.01		D1946	Total/NA
Nitrogen	770000		20000	10000	ppm v/v	2.01		D1946	Total/NA
Oxygen	17000		4000	600	ppm v/v	2.01		D1946	Total/NA
Acetone	57		4.8	1.8	ug/m3	2.52		TO-15	Total/NA
Benzene	440		2.4	1.2	ug/m3	2.52		TO-15	Total/NA
2-Butanone (MEK)	14		5.9	3.0	ug/m3	2.52		TO-15	Total/NA
Carbon disulfide	14		6.3	1.6	ug/m3	2.52		TO-15	Total/NA
Chloroform	2.5	J	3.7	1.2	ug/m3	2.52		TO-15	Total/NA
Chloromethane	1.2	J	4.2	1.0	ug/m3	2.52		TO-15	Total/NA
Dichlorodifluoromethane	3.7	J	5.0	1.9	ug/m3	2.52		TO-15	Total/NA
Ethylbenzene	29		4.4	1.6	ug/m3	2.52		TO-15	Total/NA
4-Ethyltoluene	43		5.0	2.5	ug/m3	2.52		TO-15	Total/NA
Methylene chloride	2.4	J	3.5	1.8	ug/m3	2.52		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	30		4.1	2.1	ug/m3	2.52		TO-15	Total/NA
Toluene	99		3.8	1.9	ug/m3	2.52		TO-15	Total/NA
Trichlorofluoromethane	57		5.7	2.1	ug/m3	2.52		TO-15	Total/NA
1,2,4-Trimethylbenzene	63		31	3.1	ug/m3	2.52		TO-15	Total/NA
1,3,5-Trimethylbenzene	20		5.0	3.1	ug/m3	2.52		TO-15	Total/NA
m,p-Xylene	120		8.8	2.2	ug/m3	2.52		TO-15	Total/NA
o-Xylene	40		4.4	2.2	ug/m3	2.52		TO-15	Total/NA

Client Sample ID: SGMP-100-20120607 — Lab Sample ID: 340-2373-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	18		0.021	0.0042	% v/v	2.09		D1946	Total/NA
Methane (FID)	0.19		0.00042	0.00013	% v/v	2.09		D1946	Total/NA
Nitrogen	77		2.1	1.0	% v/v	2.09		D1946	Total/NA
Oxygen	1.3		0.42	0.063	% v/v	2.09		D1946	Total/NA
Acetone	25		2.1	0.78	ppb v/v	2.61		TO-15	Total/NA
Benzene	140		0.78	0.39	ppb v/v	2.61		TO-15	Total/NA
2-Butanone (MEK)	4.6		2.1	1.0	ppb v/v	2.61		TO-15	Total/NA
Carbon disulfide	4.6		2.1	0.52	ppb v/v	2.61		TO-15	Total/NA
Chloroform	0.53	J	0.78	0.26	ppb v/v	2.61		TO-15	Total/NA
Chloromethane	0.64	J	2.1	0.52	ppb v/v	2.61		TO-15	Total/NA
Dichlorodifluoromethane	0.69	J	1.0	0.39	ppb v/v	2.61		TO-15	Total/NA
Ethylbenzene	6.9		1.0	0.39	ppb v/v	2.61		TO-15	Total/NA
4-Ethyltoluene	8.7		1.0	0.52	ppb v/v	2.61		TO-15	Total/NA
Methylene chloride	0.63	J	1.0	0.52	ppb v/v	2.61		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	6.9		1.0	0.52	ppb v/v	2.61		TO-15	Total/NA
Toluene	27		1.0	0.52	ppb v/v	2.61		TO-15	Total/NA
Trichlorofluoromethane	10		1.0	0.39	ppb v/v	2.61		TO-15	Total/NA

Client Sample ID: SGMP-100-20120607 (Continued)

Lab Sample ID: 340-2373-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	12		6.5	0.65	ppb v/v	2.61		TO-15	Total/NA
1,3,5-Trimethylbenzene	3.9		1.0	0.65	ppb v/v	2.61		TO-15	Total/NA
m,p-Xylene	28		2.1	0.52	ppb v/v	2.61		TO-15	Total/NA
o-Xylene	9.3		1.0	0.52	ppb v/v	2.61		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	180000		210	42	ppm v/v	2.09		D1946	Total/NA
Methane (FID)	1900		4.2	1.3	ppm v/v	2.09		D1946	Total/NA
Nitrogen	770000		21000	10000	ppm v/v	2.09		D1946	Total/NA
Oxygen	13000		4200	630	ppm v/v	2.09		D1946	Total/NA
Acetone	60		5.0	1.9	ug/m3	2.61		TO-15	Total/NA
Benzene	460		2.5	1.3	ug/m3	2.61		TO-15	Total/NA
2-Butanone (MEK)	14		6.2	3.1	ug/m3	2.61		TO-15	Total/NA
Carbon disulfide	14		6.5	1.6	ug/m3	2.61		TO-15	Total/NA
Chloroform	2.6	J	3.8	1.3	ug/m3	2.61		TO-15	Total/NA
Chloromethane	1.3	J	4.3	1.1	ug/m3	2.61		TO-15	Total/NA
Dichlorodifluoromethane	3.4	J	5.2	1.9	ug/m3	2.61		TO-15	Total/NA
Ethylbenzene	30		4.5	1.7	ug/m3	2.61		TO-15	Total/NA
4-Ethyltoluene	43		5.1	2.6	ug/m3	2.61		TO-15	Total/NA
Methylene chloride	2.2	J	3.6	1.8	ug/m3	2.61		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	28		4.3	2.1	ug/m3	2.61		TO-15	Total/NA
Toluene	100		3.9	2.0	ug/m3	2.61		TO-15	Total/NA
Trichlorofluoromethane	58		5.9	2.2	ug/m3	2.61		TO-15	Total/NA
1,2,4-Trimethylbenzene	61		32	3.2	ug/m3	2.61		TO-15	Total/NA
1,3,5-Trimethylbenzene	19		5.1	3.2	ug/m3	2.61		TO-15	Total/NA
m,p-Xylene	120		9.1	2.3	ug/m3	2.61		TO-15	Total/NA
o-Xylene	40		4.5	2.3	ug/m3	2.61		TO-15	Total/NA

Client Sample ID: SGMP-11-20120607

Lab Sample ID: 340-2373-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	13		0.021	0.0042	% v/v	2.1		D1946	Total/NA
Methane (TCD)	4.6		0.00042	0.00013	% v/v	2.1		D1946	Total/NA
Nitrogen	78		2.1	1.1	% v/v	2.1		D1946	Total/NA
Oxygen	1.3		0.42	0.063	% v/v	2.1		D1946	Total/NA
Acetone	9.0		1.8	0.66	ppb v/v	2.21		TO-15	Total/NA
Benzene	42		0.66	0.33	ppb v/v	2.21		TO-15	Total/NA
2-Butanone (MEK)	1.7	J	1.8	0.88	ppb v/v	2.21		TO-15	Total/NA
Carbon disulfide	3.2		1.8	0.44	ppb v/v	2.21		TO-15	Total/NA
Chloroethane	2.6		1.8	0.44	ppb v/v	2.21		TO-15	Total/NA
Chloroform	0.43	J	0.66	0.22	ppb v/v	2.21		TO-15	Total/NA
Dichlorodifluoromethane	0.69	J	0.88	0.33	ppb v/v	2.21		TO-15	Total/NA
Ethylbenzene	2.4		0.88	0.33	ppb v/v	2.21		TO-15	Total/NA
4-Ethyltoluene	2.9		0.88	0.44	ppb v/v	2.21		TO-15	Total/NA
Methylene chloride	0.64	J	0.88	0.44	ppb v/v	2.21		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	2.4		0.88	0.44	ppb v/v	2.21		TO-15	Total/NA
Toluene	8.0		0.88	0.44	ppb v/v	2.21		TO-15	Total/NA
Trichlorofluoromethane	33		0.88	0.33	ppb v/v	2.21		TO-15	Total/NA
1,2,4-Trimethylbenzene	4.0	J	5.5	0.55	ppb v/v	2.21		TO-15	Total/NA
1,3,5-Trimethylbenzene	1.3		0.88	0.55	ppb v/v	2.21		TO-15	Total/NA
Vinyl chloride	2.1		0.44	0.22	ppb v/v	2.21		TO-15	Total/NA
m,p-Xylene	9.8		1.8	0.44	ppb v/v	2.21		TO-15	Total/NA
o-Xylene	3.5		0.88	0.44	ppb v/v	2.21		TO-15	Total/NA

Client Sample ID: SGMP-11-20120607 (Continued) — Lab Sample ID: 340-2373-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	130000		210	42	ppm v/v	2.1		D1946	Total/NA
Methane (TCD)	46000		4.2	1.3	ppm v/v	2.1		D1946	Total/NA
Nitrogen	780000		21000	11000	ppm v/v	2.1		D1946	Total/NA
Oxygen	13000		4200	630	ppm v/v	2.1		D1946	Total/NA
Acetone	21		4.2	1.6	ug/m3	2.21		TO-15	Total/NA
Benzene	130		2.1	1.1	ug/m3	2.21		TO-15	Total/NA
2-Butanone (MEK)	5.0	J	5.2	2.6	ug/m3	2.21		TO-15	Total/NA
Carbon disulfide	10		5.5	1.4	ug/m3	2.21		TO-15	Total/NA
Chloroethane	6.8		4.7	1.2	ug/m3	2.21		TO-15	Total/NA
Chloroform	2.1	J	3.2	1.1	ug/m3	2.21		TO-15	Total/NA
Dichlorodifluoromethane	3.4	J	4.4	1.6	ug/m3	2.21		TO-15	Total/NA
Ethylbenzene	10		3.8	1.4	ug/m3	2.21		TO-15	Total/NA
4-Ethyltoluene	14		4.3	2.2	ug/m3	2.21		TO-15	Total/NA
Methylene chloride	2.2	J	3.1	1.5	ug/m3	2.21		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	9.9		3.6	1.8	ug/m3	2.21		TO-15	Total/NA
Toluene	30		3.3	1.7	ug/m3	2.21		TO-15	Total/NA
Trichlorofluoromethane	180		5.0	1.9	ug/m3	2.21		TO-15	Total/NA
1,2,4-Trimethylbenzene	20	J	27	2.7	ug/m3	2.21		TO-15	Total/NA
1,3,5-Trimethylbenzene	6.5		4.3	2.7	ug/m3	2.21		TO-15	Total/NA
Vinyl chloride	5.5		1.1	0.56	ug/m3	2.21		TO-15	Total/NA
m,p-Xylene	43		7.7	1.9	ug/m3	2.21		TO-15	Total/NA
o-Xylene	15		3.8	1.9	ug/m3	2.21		TO-15	Total/NA

Client Sample ID: SGMP-12-20120607 — Lab Sample ID: 340-2373-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	24		0.018	0.0036	% v/v	1.79		D1946	Total/NA
Methane (FID)	0.17		0.00036	0.00011	% v/v	1.79		D1946	Total/NA
Nitrogen	72		1.8	0.90	% v/v	1.79		D1946	Total/NA
Oxygen	1.4		0.36	0.054	% v/v	1.79		D1946	Total/NA
Acetone	8.5		4.5	1.7	ppb v/v	5.58		TO-15	Total/NA
Benzene	200		1.7	0.84	ppb v/v	5.58		TO-15	Total/NA
Carbon disulfide	6.7		4.5	1.1	ppb v/v	5.58		TO-15	Total/NA
Ethylbenzene	7.1		2.2	0.84	ppb v/v	5.58		TO-15	Total/NA
4-Ethyltoluene	8.4		2.2	1.1	ppb v/v	5.58		TO-15	Total/NA
Methylene chloride	2.2		2.2	1.1	ppb v/v	5.58		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	8.9		2.2	1.1	ppb v/v	5.58		TO-15	Total/NA
Toluene	27		2.2	1.1	ppb v/v	5.58		TO-15	Total/NA
Trichlorofluoromethane	2.0	J	2.2	0.84	ppb v/v	5.58		TO-15	Total/NA
1,2,4-Trimethylbenzene	11	J	14	1.4	ppb v/v	5.58		TO-15	Total/NA
1,3,5-Trimethylbenzene	3.8		2.2	1.4	ppb v/v	5.58		TO-15	Total/NA
m,p-Xylene	26		4.5	1.1	ppb v/v	5.58		TO-15	Total/NA
o-Xylene	8.7		2.2	1.1	ppb v/v	5.58		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	240000		180	36	ppm v/v	1.79		D1946	Total/NA
Methane (FID)	1700		3.6	1.1	ppm v/v	1.79		D1946	Total/NA
Nitrogen	720000		18000	9000	ppm v/v	1.79		D1946	Total/NA
Oxygen	14000		3600	540	ppm v/v	1.79		D1946	Total/NA
Acetone	20		11	4.0	ug/m3	5.58		TO-15	Total/NA
Benzene	620		5.3	2.7	ug/m3	5.58		TO-15	Total/NA
Carbon disulfide	21		14	3.5	ug/m3	5.58		TO-15	Total/NA
Ethylbenzene	31		9.7	3.6	ug/m3	5.58		TO-15	Total/NA
4-Ethyltoluene	42		11	5.5	ug/m3	5.58		TO-15	Total/NA

Client Sample ID: SGMP-12-20120607 (Continued)

Lab Sample ID: 340-2373-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene chloride	7.6		7.8	3.9	ug/m3	5.58		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	36		9.1	4.6	ug/m3	5.58		TO-15	Total/NA
Toluene	100		8.4	4.2	ug/m3	5.58		TO-15	Total/NA
Trichlorofluoromethane	11	J	13	4.7	ug/m3	5.58		TO-15	Total/NA
1,2,4-Trimethylbenzene	55	J	69	6.9	ug/m3	5.58		TO-15	Total/NA
1,3,5-Trimethylbenzene	18		11	6.9	ug/m3	5.58		TO-15	Total/NA
m,p-Xylene	110		19	4.8	ug/m3	5.58		TO-15	Total/NA
o-Xylene	38		9.7	4.8	ug/m3	5.58		TO-15	Total/NA

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-02-20120606
Date Collected: 06/06/12 09:47
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-1
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**7.9**		0.020	0.0040	% v/v			06/12/12 16:08	1.99
Helium	**0.38**		0.040	0.020	% v/v			06/12/12 16:08	1.99
Methane (FID)	**0.00052**		0.00040	0.00012	% v/v			06/12/12 16:08	1.99
Nitrogen	**80**		2.0	1.0	% v/v			06/12/12 16:08	1.99
Oxygen	**7.1**		0.40	0.060	% v/v			06/12/12 16:08	1.99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**79000**		200	40	ppm v/v			06/12/12 16:08	1.99
Helium	**3800**		400	200	ppm v/v			06/12/12 16:08	1.99
Methane (FID)	**5.2**		4.0	1.2	ppm v/v			06/12/12 16:08	1.99
Nitrogen	**800000**		20000	10000	ppm v/v			06/12/12 16:08	1.99
Oxygen	**71000**		4000	600	ppm v/v			06/12/12 16:08	1.99

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**9.2**		0.80	0.30	ppb v/v			06/19/12 04:37	1
Benzene	**39**		0.74	0.37	ppb v/v			06/19/12 16:16	2.47
Benzyl chloride	ND		0.80	0.25	ppb v/v			06/19/12 04:37	1
Bromodichloromethane	ND		0.30	0.15	ppb v/v			06/19/12 04:37	1
Bromoform	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
Bromomethane	ND		0.80	0.20	ppb v/v			06/19/12 04:37	1
2-Butanone (MEK)	**1.9**		0.80	0.40	ppb v/v			06/19/12 04:37	1
Carbon disulfide	**8.6**		0.80	0.20	ppb v/v			06/19/12 04:37	1
Carbon tetrachloride	ND		0.80	0.25	ppb v/v			06/19/12 04:37	1
Chlorobenzene	ND		0.30	0.10	ppb v/v			06/19/12 04:37	1
Dibromochloromethane	ND		0.40	0.10	ppb v/v			06/19/12 04:37	1
Chloroethane	ND		0.80	0.20	ppb v/v			06/19/12 04:37	1
Chloroform	**0.55**		0.30	0.10	ppb v/v			06/19/12 04:37	1
Chloromethane	**0.31**	**J**	0.80	0.20	ppb v/v			06/19/12 04:37	1
1,2-Dibromoethane (EDB)	ND		0.80	0.20	ppb v/v			06/19/12 04:37	1
1,2-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 04:37	1
1,3-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 04:37	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 04:37	1
Dichlorodifluoromethane	**0.48**		0.40	0.15	ppb v/v			06/19/12 04:37	1
1,1-Dichloroethane	ND		0.30	0.15	ppb v/v			06/19/12 04:37	1
1,2-Dichloroethane	ND		0.80	0.30	ppb v/v			06/19/12 04:37	1
1,1-Dichloroethene	ND		0.80	0.20	ppb v/v			06/19/12 04:37	1
cis-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
trans-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
1,2-Dichloropropane	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
cis-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
trans-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
Ethylbenzene	**8.6**		0.40	0.15	ppb v/v			06/19/12 04:37	1
4-Ethyltoluene	**9.5**		0.40	0.20	ppb v/v			06/19/12 04:37	1
Hexachlorobutadiene	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
2-Hexanone	ND		0.40	0.25	ppb v/v			06/19/12 04:37	1
Methylene chloride	**4.1**		0.40	0.20	ppb v/v			06/19/12 04:37	1
4-Methyl-2-pentanone (MIBK)	**5.9**		0.40	0.20	ppb v/v			06/19/12 04:37	1
Styrene	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.10	ppb v/v			06/19/12 04:37	1

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-02-20120606
Date Collected: 06/06/12 09:47
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
Toluene	**23**		0.40	0.20	ppb v/v			06/19/12 04:37	1
1,2,4-Trichlorobenzene	ND		2.5	1.0	ppb v/v			06/19/12 04:37	1
1,1,1-Trichloroethane	**0.28**	**J**	0.30	0.15	ppb v/v			06/19/12 04:37	1
1,1,2-Trichloroethane	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
Trichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
Trichlorofluoromethane	**7.3**		0.40	0.15	ppb v/v			06/19/12 04:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.20	ppb v/v			06/19/12 04:37	1
1,2,4-Trimethylbenzene	**11**		2.5	0.25	ppb v/v			06/19/12 04:37	1
1,3,5-Trimethylbenzene	**4.5**		0.40	0.25	ppb v/v			06/19/12 04:37	1
Vinyl acetate	ND		0.80	0.20	ppb v/v			06/19/12 04:37	1
Vinyl chloride	ND		0.20	0.10	ppb v/v			06/19/12 04:37	1
m,p-Xylene	**31**		0.80	0.20	ppb v/v			06/19/12 04:37	1
o-Xylene	**8.8**		0.40	0.20	ppb v/v			06/19/12 04:37	1
Naphthalene	ND		2.0	0.80	ppb v/v			06/19/12 04:37	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**22**		1.9	0.71	ug/m3			06/19/12 04:37	1
Benzene	**120**		2.4	1.2	ug/m3			06/19/12 16:16	2.47
Benzyl chloride	ND		4.1	1.3	ug/m3			06/19/12 04:37	1
Bromodichloromethane	ND		2.0	1.0	ug/m3			06/19/12 04:37	1
Bromoform	ND		4.1	2.1	ug/m3			06/19/12 04:37	1
Bromomethane	ND		3.1	0.78	ug/m3			06/19/12 04:37	1
2-Butanone (MEK)	**5.7**		2.4	1.2	ug/m3			06/19/12 04:37	1
Carbon disulfide	**27**		2.5	0.62	ug/m3			06/19/12 04:37	1
Carbon tetrachloride	ND		5.0	1.6	ug/m3			06/19/12 04:37	1
Chlorobenzene	ND		1.4	0.46	ug/m3			06/19/12 04:37	1
Dibromochloromethane	ND		3.4	0.85	ug/m3			06/19/12 04:37	1
Chloroethane	ND		2.1	0.53	ug/m3			06/19/12 04:37	1
Chloroform	**2.7**		1.5	0.49	ug/m3			06/19/12 04:37	1
Chloromethane	**0.64**	**J**	1.7	0.41	ug/m3			06/19/12 04:37	1
1,2-Dibromoethane (EDB)	ND		6.1	1.5	ug/m3			06/19/12 04:37	1
1,2-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 04:37	1
1,3-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 04:37	1
1,4-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 04:37	1
Dichlorodifluoromethane	**2.4**		2.0	0.74	ug/m3			06/19/12 04:37	1
1,1-Dichloroethane	ND		1.2	0.61	ug/m3			06/19/12 04:37	1
1,2-Dichloroethane	ND		3.2	1.2	ug/m3			06/19/12 04:37	1
1,1-Dichloroethene	ND		3.2	0.79	ug/m3			06/19/12 04:37	1
cis-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/19/12 04:37	1
trans-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/19/12 04:37	1
1,2-Dichloropropane	ND		1.8	0.92	ug/m3			06/19/12 04:37	1
cis-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/19/12 04:37	1
trans-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/19/12 04:37	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8	1.4	ug/m3			06/19/12 04:37	1
Ethylbenzene	**37**		1.7	0.65	ug/m3			06/19/12 04:37	1
4-Ethyltoluene	**47**		2.0	0.98	ug/m3			06/19/12 04:37	1
Hexachlorobutadiene	ND		4.3	2.1	ug/m3			06/19/12 04:37	1
2-Hexanone	ND		1.6	1.0	ug/m3			06/19/12 04:37	1
Methylene chloride	**14**		1.4	0.69	ug/m3			06/19/12 04:37	1
4-Methyl-2-pentanone (MIBK)	**24**		1.6	0.82	ug/m3			06/19/12 04:37	1

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-02-20120606
Date Collected: 06/06/12 09:47
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.7	0.85	ug/m3			06/19/12 04:37	1
1,1,2,2-Tetrachloroethane	ND		2.7	0.69	ug/m3			06/19/12 04:37	1
Tetrachloroethene	ND		2.7	1.4	ug/m3			06/19/12 04:37	1
Toluene	**87**		1.5	0.75	ug/m3			06/19/12 04:37	1
1,2,4-Trichlorobenzene	ND		19	7.4	ug/m3			06/19/12 04:37	1
1,1,1-Trichloroethane	**1.5**	**J**	1.6	0.82	ug/m3			06/19/12 04:37	1
1,1,2-Trichloroethane	ND		2.2	1.1	ug/m3			06/19/12 04:37	1
Trichloroethene	ND		2.1	1.1	ug/m3			06/19/12 04:37	1
Trichlorofluoromethane	**41**		2.2	0.84	ug/m3			06/19/12 04:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.5	ug/m3			06/19/12 04:37	1
1,2,4-Trimethylbenzene	**56**		12	1.2	ug/m3			06/19/12 04:37	1
1,3,5-Trimethylbenzene	**22**		2.0	1.2	ug/m3			06/19/12 04:37	1
Vinyl acetate	ND		2.8	0.70	ug/m3			06/19/12 04:37	1
Vinyl chloride	ND		0.51	0.26	ug/m3			06/19/12 04:37	1
m,p-Xylene	**140**		3.5	0.87	ug/m3			06/19/12 04:37	1
o-Xylene	**38**		1.7	0.87	ug/m3			06/19/12 04:37	1
Naphthalene	ND		10	4.2	ug/m3			06/19/12 04:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*06/19/12 04:37*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*06/19/12 16:16*	*2.47*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*06/19/12 04:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*06/19/12 16:16*	*2.47*
Toluene-d8 (Surr)	*99*		*70 - 130*		*06/19/12 04:37*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*06/19/12 16:16*	*2.47*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-03-20120606
Date Collected: 06/06/12 11:30
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-2
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**25**		0.019	0.0038	% v/v			06/12/12 16:26	1.92
Helium	ND		0.038	0.019	% v/v			06/12/12 16:26	1.92
Methane (TCD)	**40**		0.00038	0.00012	% v/v			06/12/12 16:26	1.92
Nitrogen	**33**		1.9	0.96	% v/v			06/12/12 16:26	1.92
Oxygen	**0.94**		0.38	0.058	% v/v			06/12/12 16:26	1.92

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**250000**		190	38	ppm v/v			06/12/12 16:26	1.92
Helium	ND		380	190	ppm v/v			06/12/12 16:26	1.92
Methane (TCD)	**400000**		3.8	1.2	ppm v/v			06/12/12 16:26	1.92
Nitrogen	**330000**		19000	9600	ppm v/v			06/12/12 16:26	1.92
Oxygen	**9400**		3800	580	ppm v/v			06/12/12 16:26	1.92

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		19	7.2	ppb v/v			06/19/12 05:18	24
Benzene	**35**		7.2	3.6	ppb v/v			06/19/12 05:18	24
Benzyl chloride	ND		19	6.0	ppb v/v			06/19/12 05:18	24
Bromodichloromethane	ND		7.2	3.6	ppb v/v			06/19/12 05:18	24
Bromoform	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
Bromomethane	ND		19	4.8	ppb v/v			06/19/12 05:18	24
2-Butanone (MEK)	ND		19	9.6	ppb v/v			06/19/12 05:18	24
Carbon disulfide	ND		19	4.8	ppb v/v			06/19/12 05:18	24
Carbon tetrachloride	ND		19	6.0	ppb v/v			06/19/12 05:18	24
Chlorobenzene	ND		7.2	2.4	ppb v/v			06/19/12 05:18	24
Dibromochloromethane	ND		9.6	2.4	ppb v/v			06/19/12 05:18	24
Chloroethane	ND		19	4.8	ppb v/v			06/19/12 05:18	24
Chloroform	ND		7.2	2.4	ppb v/v			06/19/12 05:18	24
Chloromethane	ND		19	4.8	ppb v/v			06/19/12 05:18	24
1,2-Dibromoethane (EDB)	ND		19	4.8	ppb v/v			06/19/12 05:18	24
1,2-Dichlorobenzene	ND		9.6	3.6	ppb v/v			06/19/12 05:18	24
1,3-Dichlorobenzene	ND		9.6	3.6	ppb v/v			06/19/12 05:18	24
1,4-Dichlorobenzene	ND		9.6	3.6	ppb v/v			06/19/12 05:18	24
Dichlorodifluoromethane	ND		9.6	3.6	ppb v/v			06/19/12 05:18	24
1,1-Dichloroethane	ND		7.2	3.6	ppb v/v			06/19/12 05:18	24
1,2-Dichloroethane	ND		19	7.2	ppb v/v			06/19/12 05:18	24
1,1-Dichloroethene	ND		19	4.8	ppb v/v			06/19/12 05:18	24
cis-1,2-Dichloroethene	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
trans-1,2-Dichloroethene	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
1,2-Dichloropropane	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
cis-1,3-Dichloropropene	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
trans-1,3-Dichloropropene	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
Ethylbenzene	**5.4**	**J**	9.6	3.6	ppb v/v			06/19/12 05:18	24
4-Ethyltoluene	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
Hexachlorobutadiene	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
2-Hexanone	ND		9.6	6.0	ppb v/v			06/19/12 05:18	24
Methylene chloride	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
4-Methyl-2-pentanone (MIBK)	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
Styrene	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
1,1,2,2-Tetrachloroethane	ND		9.6	2.4	ppb v/v			06/19/12 05:18	24

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-03-20120606
Date Collected: 06/06/12 11:30
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
Toluene	**9.7**		9.6	4.8	ppb v/v			06/19/12 05:18	24
1,2,4-Trichlorobenzene	ND		60	24	ppb v/v			06/19/12 05:18	24
1,1,1-Trichloroethane	ND		7.2	3.6	ppb v/v			06/19/12 05:18	24
1,1,2-Trichloroethane	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
Trichloroethene	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
Trichlorofluoromethane	ND		9.6	3.6	ppb v/v			06/19/12 05:18	24
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
1,2,4-Trimethylbenzene	ND		60	6.0	ppb v/v			06/19/12 05:18	24
1,3,5-Trimethylbenzene	ND		9.6	6.0	ppb v/v			06/19/12 05:18	24
Vinyl acetate	ND		19	4.8	ppb v/v			06/19/12 05:18	24
Vinyl chloride	ND		4.8	2.4	ppb v/v			06/19/12 05:18	24
m,p-Xylene	**22**		19	4.8	ppb v/v			06/19/12 05:18	24
o-Xylene	ND		9.6	4.8	ppb v/v			06/19/12 05:18	24
Naphthalene	ND		48	19	ppb v/v			06/19/12 05:18	24

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		46	17	ug/m3			06/19/12 05:18	24
Benzene	**110**		23	12	ug/m3			06/19/12 05:18	24
Benzyl chloride	ND		99	31	ug/m3			06/19/12 05:18	24
Bromodichloromethane	ND		48	24	ug/m3			06/19/12 05:18	24
Bromoform	ND		99	50	ug/m3			06/19/12 05:18	24
Bromomethane	ND		75	19	ug/m3			06/19/12 05:18	24
2-Butanone (MEK)	ND		57	28	ug/m3			06/19/12 05:18	24
Carbon disulfide	ND		60	15	ug/m3			06/19/12 05:18	24
Carbon tetrachloride	ND		120	38	ug/m3			06/19/12 05:18	24
Chlorobenzene	ND		33	11	ug/m3			06/19/12 05:18	24
Dibromochloromethane	ND		82	20	ug/m3			06/19/12 05:18	24
Chloroethane	ND		51	13	ug/m3			06/19/12 05:18	24
Chloroform	ND		35	12	ug/m3			06/19/12 05:18	24
Chloromethane	ND		40	9.9	ug/m3			06/19/12 05:18	24
1,2-Dibromoethane (EDB)	ND		150	37	ug/m3			06/19/12 05:18	24
1,2-Dichlorobenzene	ND		58	22	ug/m3			06/19/12 05:18	24
1,3-Dichlorobenzene	ND		58	22	ug/m3			06/19/12 05:18	24
1,4-Dichlorobenzene	ND		58	22	ug/m3			06/19/12 05:18	24
Dichlorodifluoromethane	ND		47	18	ug/m3			06/19/12 05:18	24
1,1-Dichloroethane	ND		29	15	ug/m3			06/19/12 05:18	24
1,2-Dichloroethane	ND		78	29	ug/m3			06/19/12 05:18	24
1,1-Dichloroethene	ND		76	19	ug/m3			06/19/12 05:18	24
cis-1,2-Dichloroethene	ND		38	19	ug/m3			06/19/12 05:18	24
trans-1,2-Dichloroethene	ND		38	19	ug/m3			06/19/12 05:18	24
1,2-Dichloropropane	ND		44	22	ug/m3			06/19/12 05:18	24
cis-1,3-Dichloropropene	ND		44	22	ug/m3			06/19/12 05:18	24
trans-1,3-Dichloropropene	ND		44	22	ug/m3			06/19/12 05:18	24
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		67	34	ug/m3			06/19/12 05:18	24
Ethylbenzene	**24**	**J**	42	16	ug/m3			06/19/12 05:18	24
4-Ethyltoluene	ND		47	24	ug/m3			06/19/12 05:18	24
Hexachlorobutadiene	ND		100	51	ug/m3			06/19/12 05:18	24
2-Hexanone	ND		39	25	ug/m3			06/19/12 05:18	24
Methylene chloride	ND		33	17	ug/m3			06/19/12 05:18	24
4-Methyl-2-pentanone (MIBK)	ND		39	20	ug/m3			06/19/12 05:18	24

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-03-20120606
Date Collected: 06/06/12 11:30
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		41	20	ug/m3			06/19/12 05:18	24
1,1,2,2-Tetrachloroethane	ND		66	16	ug/m3			06/19/12 05:18	24
Tetrachloroethene	ND		65	33	ug/m3			06/19/12 05:18	24
Toluene	**37**		36	18	ug/m3			06/19/12 05:18	24
1,2,4-Trichlorobenzene	ND		450	180	ug/m3			06/19/12 05:18	24
1,1,1-Trichloroethane	ND		39	20	ug/m3			06/19/12 05:18	24
1,1,2-Trichloroethane	ND		52	26	ug/m3			06/19/12 05:18	24
Trichloroethene	ND		52	26	ug/m3			06/19/12 05:18	24
Trichlorofluoromethane	ND		54	20	ug/m3			06/19/12 05:18	24
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		74	37	ug/m3			06/19/12 05:18	24
1,2,4-Trimethylbenzene	ND		290	29	ug/m3			06/19/12 05:18	24
1,3,5-Trimethylbenzene	ND		47	29	ug/m3			06/19/12 05:18	24
Vinyl acetate	ND		68	17	ug/m3			06/19/12 05:18	24
Vinyl chloride	ND		12	6.1	ug/m3			06/19/12 05:18	24
m,p-Xylene	**96**		83	21	ug/m3			06/19/12 05:18	24
o-Xylene	ND		42	21	ug/m3			06/19/12 05:18	24
Naphthalene	ND		250	100	ug/m3			06/19/12 05:18	24

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*	*X*	*70 - 130*		*06/19/12 05:18*	*24*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*06/19/12 05:18*	*24*
Toluene-d8 (Surr)	*104*		*70 - 130*		*06/19/12 05:18*	*24*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-04-20120606
Date Collected: 06/06/12 12:09
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-3
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**7.1**		0.020	0.0041	% v/v			06/12/12 16:45	2.03
Helium	ND		0.041	0.020	% v/v			06/12/12 16:45	2.03
Methane (FID)	**0.047**		0.00041	0.00012	% v/v			06/12/12 16:45	2.03
Nitrogen	**87**		2.0	1.0	% v/v			06/12/12 16:45	2.03
Oxygen	**1.7**		0.41	0.061	% v/v			06/12/12 16:45	2.03

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**71000**		200	41	ppm v/v			06/12/12 16:45	2.03
Helium	ND		410	200	ppm v/v			06/12/12 16:45	2.03
Methane (FID)	**470**		4.1	1.2	ppm v/v			06/12/12 16:45	2.03
Nitrogen	**870000**		20000	10000	ppm v/v			06/12/12 16:45	2.03
Oxygen	**17000**		4100	610	ppm v/v			06/12/12 16:45	2.03

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**15**		0.80	0.30	ppb v/v			06/19/12 06:13	1
Benzene	**110**		1.7	0.87	ppb v/v			06/19/12 17:03	5.77
Benzyl chloride	ND		0.80	0.25	ppb v/v			06/19/12 06:13	1
Bromodichloromethane	ND		0.30	0.15	ppb v/v			06/19/12 06:13	1
Bromoform	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
Bromomethane	ND		0.80	0.20	ppb v/v			06/19/12 06:13	1
2-Butanone (MEK)	**3.9**		0.80	0.40	ppb v/v			06/19/12 06:13	1
Carbon disulfide	**1.5**		0.80	0.20	ppb v/v			06/19/12 06:13	1
Carbon tetrachloride	ND		0.80	0.25	ppb v/v			06/19/12 06:13	1
Chlorobenzene	ND		0.30	0.10	ppb v/v			06/19/12 06:13	1
Dibromochloromethane	ND		0.40	0.10	ppb v/v			06/19/12 06:13	1
Chloroethane	ND		0.80	0.20	ppb v/v			06/19/12 06:13	1
Chloroform	**0.19**	**J**	0.30	0.10	ppb v/v			06/19/12 06:13	1
Chloromethane	**0.35**	**J**	0.80	0.20	ppb v/v			06/19/12 06:13	1
1,2-Dibromoethane (EDB)	ND		0.80	0.20	ppb v/v			06/19/12 06:13	1
1,2-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 06:13	1
1,3-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 06:13	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 06:13	1
Dichlorodifluoromethane	**0.56**		0.40	0.15	ppb v/v			06/19/12 06:13	1
1,1-Dichloroethane	ND		0.30	0.15	ppb v/v			06/19/12 06:13	1
1,2-Dichloroethane	ND		0.80	0.30	ppb v/v			06/19/12 06:13	1
1,1-Dichloroethene	ND		0.80	0.20	ppb v/v			06/19/12 06:13	1
cis-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
trans-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
1,2-Dichloropropane	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
cis-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
trans-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
Ethylbenzene	**6.8**		0.40	0.15	ppb v/v			06/19/12 06:13	1
4-Ethyltoluene	**8.4**		0.40	0.20	ppb v/v			06/19/12 06:13	1
Hexachlorobutadiene	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
2-Hexanone	ND		0.40	0.25	ppb v/v			06/19/12 06:13	1
Methylene chloride	**1.9**		0.40	0.20	ppb v/v			06/19/12 06:13	1
4-Methyl-2-pentanone (MIBK)	**9.7**		0.40	0.20	ppb v/v			06/19/12 06:13	1
Styrene	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.10	ppb v/v			06/19/12 06:13	1

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-04-20120606
Date Collected: 06/06/12 12:09
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-3
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
Toluene	**25**		0.40	0.20	ppb v/v			06/19/12 06:13	1
1,2,4-Trichlorobenzene	ND		2.5	1.0	ppb v/v			06/19/12 06:13	1
1,1,1-Trichloroethane	ND		0.30	0.15	ppb v/v			06/19/12 06:13	1
1,1,2-Trichloroethane	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
Trichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
Trichlorofluoromethane	**1.9**		0.40	0.15	ppb v/v			06/19/12 06:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.20	ppb v/v			06/19/12 06:13	1
1,2,4-Trimethylbenzene	**11**		2.5	0.25	ppb v/v			06/19/12 06:13	1
1,3,5-Trimethylbenzene	**4.0**		0.40	0.25	ppb v/v			06/19/12 06:13	1
Vinyl acetate	ND		0.80	0.20	ppb v/v			06/19/12 06:13	1
Vinyl chloride	ND		0.20	0.10	ppb v/v			06/19/12 06:13	1
m,p-Xylene	**25**		0.80	0.20	ppb v/v			06/19/12 06:13	1
o-Xylene	**8.0**		0.40	0.20	ppb v/v			06/19/12 06:13	1
Naphthalene	**1.6**	**J**	2.0	0.80	ppb v/v			06/19/12 06:13	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**36**		1.9	0.71	ug/m3			06/19/12 06:13	1
Benzene	**350**		5.5	2.8	ug/m3			06/19/12 17:03	5.77
Benzyl chloride	ND		4.1	1.3	ug/m3			06/19/12 06:13	1
Bromodichloromethane	ND		2.0	1.0	ug/m3			06/19/12 06:13	1
Bromoform	ND		4.1	2.1	ug/m3			06/19/12 06:13	1
Bromomethane	ND		3.1	0.78	ug/m3			06/19/12 06:13	1
2-Butanone (MEK)	**11**		2.4	1.2	ug/m3			06/19/12 06:13	1
Carbon disulfide	**4.6**		2.5	0.62	ug/m3			06/19/12 06:13	1
Carbon tetrachloride	ND		5.0	1.6	ug/m3			06/19/12 06:13	1
Chlorobenzene	ND		1.4	0.46	ug/m3			06/19/12 06:13	1
Dibromochloromethane	ND		3.4	0.85	ug/m3			06/19/12 06:13	1
Chloroethane	ND		2.1	0.53	ug/m3			06/19/12 06:13	1
Chloroform	**0.91**	**J**	1.5	0.49	ug/m3			06/19/12 06:13	1
Chloromethane	**0.73**	**J**	1.7	0.41	ug/m3			06/19/12 06:13	1
1,2-Dibromoethane (EDB)	ND		6.1	1.5	ug/m3			06/19/12 06:13	1
1,2-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 06:13	1
1,3-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 06:13	1
1,4-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 06:13	1
Dichlorodifluoromethane	**2.7**		2.0	0.74	ug/m3			06/19/12 06:13	1
1,1-Dichloroethane	ND		1.2	0.61	ug/m3			06/19/12 06:13	1
1,2-Dichloroethane	ND		3.2	1.2	ug/m3			06/19/12 06:13	1
1,1-Dichloroethene	ND		3.2	0.79	ug/m3			06/19/12 06:13	1
cis-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/19/12 06:13	1
trans-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/19/12 06:13	1
1,2-Dichloropropane	ND		1.8	0.92	ug/m3			06/19/12 06:13	1
cis-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/19/12 06:13	1
trans-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/19/12 06:13	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8	1.4	ug/m3			06/19/12 06:13	1
Ethylbenzene	**29**		1.7	0.65	ug/m3			06/19/12 06:13	1
4-Ethyltoluene	**41**		2.0	0.98	ug/m3			06/19/12 06:13	1
Hexachlorobutadiene	ND		4.3	2.1	ug/m3			06/19/12 06:13	1
2-Hexanone	ND		1.6	1.0	ug/m3			06/19/12 06:13	1
Methylene chloride	**6.8**		1.4	0.69	ug/m3			06/19/12 06:13	1
4-Methyl-2-pentanone (MIBK)	**40**		1.6	0.82	ug/m3			06/19/12 06:13	1

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-04-20120606
Date Collected: 06/06/12 12:09
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-3
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.7	0.85	ug/m3			06/19/12 06:13	1
1,1,2,2-Tetrachloroethane	ND		2.7	0.69	ug/m3			06/19/12 06:13	1
Tetrachloroethene	ND		2.7	1.4	ug/m3			06/19/12 06:13	1
Toluene	**92**		1.5	0.75	ug/m3			06/19/12 06:13	1
1,2,4-Trichlorobenzene	ND		19	7.4	ug/m3			06/19/12 06:13	1
1,1,1-Trichloroethane	ND		1.6	0.82	ug/m3			06/19/12 06:13	1
1,1,2-Trichloroethane	ND		2.2	1.1	ug/m3			06/19/12 06:13	1
Trichloroethene	ND		2.1	1.1	ug/m3			06/19/12 06:13	1
Trichlorofluoromethane	**10**		2.2	0.84	ug/m3			06/19/12 06:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.5	ug/m3			06/19/12 06:13	1
1,2,4-Trimethylbenzene	**53**		12	1.2	ug/m3			06/19/12 06:13	1
1,3,5-Trimethylbenzene	**20**		2.0	1.2	ug/m3			06/19/12 06:13	1
Vinyl acetate	ND		2.8	0.70	ug/m3			06/19/12 06:13	1
Vinyl chloride	ND		0.51	0.26	ug/m3			06/19/12 06:13	1
m,p-Xylene	**110**		3.5	0.87	ug/m3			06/19/12 06:13	1
o-Xylene	**35**		1.7	0.87	ug/m3			06/19/12 06:13	1
Naphthalene	**8.4**	**J**	10	4.2	ug/m3			06/19/12 06:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*		*06/19/12 06:13*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*06/19/12 17:03*	*5.77*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*06/19/12 06:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/19/12 17:03*	*5.77*
Toluene-d8 (Surr)	*97*		*70 - 130*		*06/19/12 06:13*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/19/12 17:03*	*5.77*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-05-20120606
Lab Sample ID: 340-2373-4
Date Collected: 06/06/12 13:13
Matrix: Air
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**7.3**		0.020	0.0041	% v/v			06/12/12 17:06	2.03
Helium	ND		0.041	0.020	% v/v			06/12/12 17:06	2.03
Methane (FID)	**0.38**		0.00041	0.00012	% v/v			06/12/12 17:06	2.03
Nitrogen	**87**		2.0	1.0	% v/v			06/12/12 17:06	2.03
Oxygen	**1.2**		0.41	0.061	% v/v			06/12/12 17:06	2.03

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**73000**		200	41	ppm v/v			06/12/12 17:06	2.03
Helium	ND		410	200	ppm v/v			06/12/12 17:06	2.03
Methane (FID)	**3800**		4.1	1.2	ppm v/v			06/12/12 17:06	2.03
Nitrogen	**870000**		20000	10000	ppm v/v			06/12/12 17:06	2.03
Oxygen	**12000**		4100	610	ppm v/v			06/12/12 17:06	2.03

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**12**		0.80	0.30	ppb v/v			06/19/12 07:00	1
Benzene	**72**		0.78	0.39	ppb v/v			06/19/12 17:49	2.61
Benzyl chloride	ND		0.80	0.25	ppb v/v			06/19/12 07:00	1
Bromodichloromethane	ND		0.30	0.15	ppb v/v			06/19/12 07:00	1
Bromoform	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
Bromomethane	ND		0.80	0.20	ppb v/v			06/19/12 07:00	1
2-Butanone (MEK)	**2.7**		0.80	0.40	ppb v/v			06/19/12 07:00	1
Carbon disulfide	**1.0**		0.80	0.20	ppb v/v			06/19/12 07:00	1
Carbon tetrachloride	ND		0.80	0.25	ppb v/v			06/19/12 07:00	1
Chlorobenzene	ND		0.30	0.10	ppb v/v			06/19/12 07:00	1
Dibromochloromethane	ND		0.40	0.10	ppb v/v			06/19/12 07:00	1
Chloroethane	ND		0.80	0.20	ppb v/v			06/19/12 07:00	1
Chloroform	**0.14**	**J**	0.30	0.10	ppb v/v			06/19/12 07:00	1
Chloromethane	**0.46**	**J**	0.80	0.20	ppb v/v			06/19/12 07:00	1
1,2-Dibromoethane (EDB)	ND		0.80	0.20	ppb v/v			06/19/12 07:00	1
1,2-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 07:00	1
1,3-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 07:00	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 07:00	1
Dichlorodifluoromethane	**0.67**		0.40	0.15	ppb v/v			06/19/12 07:00	1
1,1-Dichloroethane	ND		0.30	0.15	ppb v/v			06/19/12 07:00	1
1,2-Dichloroethane	ND		0.80	0.30	ppb v/v			06/19/12 07:00	1
1,1-Dichloroethene	ND		0.80	0.20	ppb v/v			06/19/12 07:00	1
cis-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
trans-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
1,2-Dichloropropane	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
cis-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
trans-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
Ethylbenzene	**0.68**		0.40	0.15	ppb v/v			06/19/12 07:00	1
4-Ethyltoluene	**0.54**		0.40	0.20	ppb v/v			06/19/12 07:00	1
Hexachlorobutadiene	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
2-Hexanone	ND		0.40	0.25	ppb v/v			06/19/12 07:00	1
Methylene chloride	**0.28**	**J**	0.40	0.20	ppb v/v			06/19/12 07:00	1
4-Methyl-2-pentanone (MIBK)	**3.7**		0.40	0.20	ppb v/v			06/19/12 07:00	1
Styrene	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.10	ppb v/v			06/19/12 07:00	1

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-05-20120606
Date Collected: 06/06/12 13:13
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-4
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
Toluene	**3.7**		0.40	0.20	ppb v/v			06/19/12 07:00	1
1,2,4-Trichlorobenzene	ND		2.5	1.0	ppb v/v			06/19/12 07:00	1
1,1,1-Trichloroethane	ND		0.30	0.15	ppb v/v			06/19/12 07:00	1
1,1,2-Trichloroethane	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
Trichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
Trichlorofluoromethane	**1.1**		0.40	0.15	ppb v/v			06/19/12 07:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.20	ppb v/v			06/19/12 07:00	1
1,2,4-Trimethylbenzene	**0.67**	**J**	2.5	0.25	ppb v/v			06/19/12 07:00	1
1,3,5-Trimethylbenzene	**0.32**	**J**	0.40	0.25	ppb v/v			06/19/12 07:00	1
Vinyl acetate	ND		0.80	0.20	ppb v/v			06/19/12 07:00	1
Vinyl chloride	ND		0.20	0.10	ppb v/v			06/19/12 07:00	1
m,p-Xylene	**2.2**		0.80	0.20	ppb v/v			06/19/12 07:00	1
o-Xylene	**0.78**		0.40	0.20	ppb v/v			06/19/12 07:00	1
Naphthalene	ND		2.0	0.80	ppb v/v			06/19/12 07:00	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**29**		1.9	0.71	ug/m3			06/19/12 07:00	1
Benzene	**230**		2.5	1.3	ug/m3			06/19/12 17:49	2.61
Benzyl chloride	ND		4.1	1.3	ug/m3			06/19/12 07:00	1
Bromodichloromethane	ND		2.0	1.0	ug/m3			06/19/12 07:00	1
Bromoform	ND		4.1	2.1	ug/m3			06/19/12 07:00	1
Bromomethane	ND		3.1	0.78	ug/m3			06/19/12 07:00	1
2-Butanone (MEK)	**7.9**		2.4	1.2	ug/m3			06/19/12 07:00	1
Carbon disulfide	**3.3**		2.5	0.62	ug/m3			06/19/12 07:00	1
Carbon tetrachloride	ND		5.0	1.6	ug/m3			06/19/12 07:00	1
Chlorobenzene	ND		1.4	0.46	ug/m3			06/19/12 07:00	1
Dibromochloromethane	ND		3.4	0.85	ug/m3			06/19/12 07:00	1
Chloroethane	ND		2.1	0.53	ug/m3			06/19/12 07:00	1
Chloroform	**0.70**	**J**	1.5	0.49	ug/m3			06/19/12 07:00	1
Chloromethane	**0.94**	**J**	1.7	0.41	ug/m3			06/19/12 07:00	1
1,2-Dibromoethane (EDB)	ND		6.1	1.5	ug/m3			06/19/12 07:00	1
1,2-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 07:00	1
1,3-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 07:00	1
1,4-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 07:00	1
Dichlorodifluoromethane	**3.3**		2.0	0.74	ug/m3			06/19/12 07:00	1
1,1-Dichloroethane	ND		1.2	0.61	ug/m3			06/19/12 07:00	1
1,2-Dichloroethane	ND		3.2	1.2	ug/m3			06/19/12 07:00	1
1,1-Dichloroethene	ND		3.2	0.79	ug/m3			06/19/12 07:00	1
cis-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/19/12 07:00	1
trans-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/19/12 07:00	1
1,2-Dichloropropane	ND		1.8	0.92	ug/m3			06/19/12 07:00	1
cis-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/19/12 07:00	1
trans-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/19/12 07:00	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8	1.4	ug/m3			06/19/12 07:00	1
Ethylbenzene	**2.9**		1.7	0.65	ug/m3			06/19/12 07:00	1
4-Ethyltoluene	**2.7**		2.0	0.98	ug/m3			06/19/12 07:00	1
Hexachlorobutadiene	ND		4.3	2.1	ug/m3			06/19/12 07:00	1
2-Hexanone	ND		1.6	1.0	ug/m3			06/19/12 07:00	1
Methylene chloride	**0.98**	**J**	1.4	0.69	ug/m3			06/19/12 07:00	1
4-Methyl-2-pentanone (MIBK)	**15**		1.6	0.82	ug/m3			06/19/12 07:00	1

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-05-20120606
Date Collected: 06/06/12 13:13
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-4
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.7	0.85	ug/m3			06/19/12 07:00	1
1,1,2,2-Tetrachloroethane	ND		2.7	0.69	ug/m3			06/19/12 07:00	1
Tetrachloroethene	ND		2.7	1.4	ug/m3			06/19/12 07:00	1
Toluene	**14**		1.5	0.75	ug/m3			06/19/12 07:00	1
1,2,4-Trichlorobenzene	ND		19	7.4	ug/m3			06/19/12 07:00	1
1,1,1-Trichloroethane	ND		1.6	0.82	ug/m3			06/19/12 07:00	1
1,1,2-Trichloroethane	ND		2.2	1.1	ug/m3			06/19/12 07:00	1
Trichloroethene	ND		2.1	1.1	ug/m3			06/19/12 07:00	1
Trichlorofluoromethane	**6.2**		2.2	0.84	ug/m3			06/19/12 07:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.5	ug/m3			06/19/12 07:00	1
1,2,4-Trimethylbenzene	**3.3**	**J**	12	1.2	ug/m3			06/19/12 07:00	1
1,3,5-Trimethylbenzene	**1.6**	**J**	2.0	1.2	ug/m3			06/19/12 07:00	1
Vinyl acetate	ND		2.8	0.70	ug/m3			06/19/12 07:00	1
Vinyl chloride	ND		0.51	0.26	ug/m3			06/19/12 07:00	1
m,p-Xylene	**9.7**		3.5	0.87	ug/m3			06/19/12 07:00	1
o-Xylene	**3.4**		1.7	0.87	ug/m3			06/19/12 07:00	1
Naphthalene	ND		10	4.2	ug/m3			06/19/12 07:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*		*06/19/12 07:00*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*06/19/12 17:49*	*2.61*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/19/12 07:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*06/19/12 17:49*	*2.61*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/19/12 07:00*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/19/12 17:49*	*2.61*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-06-20120606
Date Collected: 06/06/12 13:50
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-5
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**8.0**		0.021	0.0043	% v/v			06/12/12 17:24	2.13
Helium	ND		0.043	0.021	% v/v			06/12/12 17:24	2.13
Methane (TCD)	**3.8**		0.00043	0.00013	% v/v			06/12/12 17:24	2.13
Nitrogen	**81**		2.1	1.1	% v/v			06/12/12 17:24	2.13
Oxygen	**2.2**		0.43	0.064	% v/v			06/12/12 17:24	2.13

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**80000**		210	43	ppm v/v			06/12/12 17:24	2.13
Helium	ND		430	210	ppm v/v			06/12/12 17:24	2.13
Methane (TCD)	**38000**		4.3	1.3	ppm v/v			06/12/12 17:24	2.13
Nitrogen	**810000**		21000	11000	ppm v/v			06/12/12 17:24	2.13
Oxygen	**22000**		4300	640	ppm v/v			06/12/12 17:24	2.13

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		210	80	ppb v/v			06/19/12 18:30	267
Benzene	**210**		80	40	ppb v/v			06/19/12 18:30	267
Benzyl chloride	ND		210	67	ppb v/v			06/19/12 18:30	267
Bromodichloromethane	ND		80	40	ppb v/v			06/19/12 18:30	267
Bromoform	ND	*	110	53	ppb v/v			06/19/12 18:30	267
Bromomethane	ND		210	53	ppb v/v			06/19/12 18:30	267
2-Butanone (MEK)	ND		210	110	ppb v/v			06/19/12 18:30	267
Carbon disulfide	ND		210	53	ppb v/v			06/19/12 18:30	267
Carbon tetrachloride	ND		210	67	ppb v/v			06/19/12 18:30	267
Chlorobenzene	**190**		80	27	ppb v/v			06/19/12 18:30	267
Dibromochloromethane	ND		110	27	ppb v/v			06/19/12 18:30	267
Chloroethane	ND		210	53	ppb v/v			06/19/12 18:30	267
Chloroform	ND		80	27	ppb v/v			06/19/12 18:30	267
Chloromethane	ND		210	53	ppb v/v			06/19/12 18:30	267
1,2-Dibromoethane (EDB)	ND		210	53	ppb v/v			06/19/12 18:30	267
1,2-Dichlorobenzene	ND		110	40	ppb v/v			06/19/12 18:30	267
1,3-Dichlorobenzene	ND		110	40	ppb v/v			06/19/12 18:30	267
1,4-Dichlorobenzene	ND		110	40	ppb v/v			06/19/12 18:30	267
Dichlorodifluoromethane	ND		110	40	ppb v/v			06/19/12 18:30	267
1,1-Dichloroethane	ND		80	40	ppb v/v			06/19/12 18:30	267
1,2-Dichloroethane	ND		210	80	ppb v/v			06/19/12 18:30	267
1,1-Dichloroethene	ND		210	53	ppb v/v			06/19/12 18:30	267
cis-1,2-Dichloroethene	**100**	**J**	110	53	ppb v/v			06/19/12 18:30	267
trans-1,2-Dichloroethene	ND		110	53	ppb v/v			06/19/12 18:30	267
1,2-Dichloropropane	ND		110	53	ppb v/v			06/19/12 18:30	267
cis-1,3-Dichloropropene	ND		110	53	ppb v/v			06/19/12 18:30	267
trans-1,3-Dichloropropene	ND		110	53	ppb v/v			06/19/12 18:30	267
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		110	53	ppb v/v			06/19/12 18:30	267
Ethylbenzene	**2600**		110	40	ppb v/v			06/19/12 18:30	267
4-Ethyltoluene	**290**		110	53	ppb v/v			06/19/12 18:30	267
Hexachlorobutadiene	ND		110	53	ppb v/v			06/19/12 18:30	267
2-Hexanone	ND		110	67	ppb v/v			06/19/12 18:30	267
Methylene chloride	ND		110	53	ppb v/v			06/19/12 18:30	267
4-Methyl-2-pentanone (MIBK)	ND		110	53	ppb v/v			06/19/12 18:30	267
Styrene	ND		110	53	ppb v/v			06/19/12 18:30	267
1,1,2,2-Tetrachloroethane	ND		110	27	ppb v/v			06/19/12 18:30	267

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-06-20120606
Date Collected: 06/06/12 13:50
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-5
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		110	53	ppb v/v			06/19/12 18:30	267
Toluene	**100**	**J**	110	53	ppb v/v			06/19/12 18:30	267
1,2,4-Trichlorobenzene	ND		670	270	ppb v/v			06/19/12 18:30	267
1,1,1-Trichloroethane	ND		80	40	ppb v/v			06/19/12 18:30	267
1,1,2-Trichloroethane	ND		110	53	ppb v/v			06/19/12 18:30	267
Trichloroethene	ND		110	53	ppb v/v			06/19/12 18:30	267
Trichlorofluoromethane	ND		110	40	ppb v/v			06/19/12 18:30	267
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		110	53	ppb v/v			06/19/12 18:30	267
1,2,4-Trimethylbenzene	**390**	**J**	670	67	ppb v/v			06/19/12 18:30	267
1,3,5-Trimethylbenzene	**180**		110	67	ppb v/v			06/19/12 18:30	267
Vinyl acetate	ND		210	53	ppb v/v			06/19/12 18:30	267
Vinyl chloride	ND		53	27	ppb v/v			06/19/12 18:30	267
m,p-Xylene	**4100**		210	53	ppb v/v			06/19/12 18:30	267
o-Xylene	**75**	**J**	110	53	ppb v/v			06/19/12 18:30	267
Naphthalene	ND		530	210	ppb v/v			06/19/12 18:30	267

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		510	190	ug/m3			06/19/12 18:30	267
Benzene	**660**		260	130	ug/m3			06/19/12 18:30	267
Benzyl chloride	ND		1100	350	ug/m3			06/19/12 18:30	267
Bromodichloromethane	ND		540	270	ug/m3			06/19/12 18:30	267
Bromoform	ND	*	1100	550	ug/m3			06/19/12 18:30	267
Bromomethane	ND		830	210	ug/m3			06/19/12 18:30	267
2-Butanone (MEK)	ND		630	310	ug/m3			06/19/12 18:30	267
Carbon disulfide	ND		670	170	ug/m3			06/19/12 18:30	267
Carbon tetrachloride	ND		1300	420	ug/m3			06/19/12 18:30	267
Chlorobenzene	**870**		370	120	ug/m3			06/19/12 18:30	267
Dibromochloromethane	ND		910	230	ug/m3			06/19/12 18:30	267
Chloroethane	ND		560	140	ug/m3			06/19/12 18:30	267
Chloroform	ND		390	130	ug/m3			06/19/12 18:30	267
Chloromethane	ND		440	110	ug/m3			06/19/12 18:30	267
1,2-Dibromoethane (EDB)	ND		1600	410	ug/m3			06/19/12 18:30	267
1,2-Dichlorobenzene	ND		640	240	ug/m3			06/19/12 18:30	267
1,3-Dichlorobenzene	ND		640	240	ug/m3			06/19/12 18:30	267
1,4-Dichlorobenzene	ND		640	240	ug/m3			06/19/12 18:30	267
Dichlorodifluoromethane	ND		530	200	ug/m3			06/19/12 18:30	267
1,1-Dichloroethane	ND		320	160	ug/m3			06/19/12 18:30	267
1,2-Dichloroethane	ND		860	320	ug/m3			06/19/12 18:30	267
1,1-Dichloroethene	ND		850	210	ug/m3			06/19/12 18:30	267
cis-1,2-Dichloroethene	**410**	**J**	420	210	ug/m3			06/19/12 18:30	267
trans-1,2-Dichloroethene	ND		420	210	ug/m3			06/19/12 18:30	267
1,2-Dichloropropane	ND		490	250	ug/m3			06/19/12 18:30	267
cis-1,3-Dichloropropene	ND		480	240	ug/m3			06/19/12 18:30	267
trans-1,3-Dichloropropene	ND		480	240	ug/m3			06/19/12 18:30	267
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		750	370	ug/m3			06/19/12 18:30	267
Ethylbenzene	**11000**		460	170	ug/m3			06/19/12 18:30	267
4-Ethyltoluene	**1400**		530	260	ug/m3			06/19/12 18:30	267
Hexachlorobutadiene	ND		1100	570	ug/m3			06/19/12 18:30	267
2-Hexanone	ND		440	270	ug/m3			06/19/12 18:30	267
Methylene chloride	ND		370	190	ug/m3			06/19/12 18:30	267
4-Methyl-2-pentanone (MIBK)	ND		440	220	ug/m3			06/19/12 18:30	267

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-06-20120606
Date Collected: 06/06/12 13:50
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-5
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		450	230	ug/m3			06/19/12 18:30	267
1,1,2,2-Tetrachloroethane	ND		730	180	ug/m3			06/19/12 18:30	267
Tetrachloroethene	ND		720	360	ug/m3			06/19/12 18:30	267
Toluene	**380**	**J**	400	200	ug/m3			06/19/12 18:30	267
1,2,4-Trichlorobenzene	ND		5000	2000	ug/m3			06/19/12 18:30	267
1,1,1-Trichloroethane	ND		440	220	ug/m3			06/19/12 18:30	267
1,1,2-Trichloroethane	ND		580	290	ug/m3			06/19/12 18:30	267
Trichloroethene	ND		570	290	ug/m3			06/19/12 18:30	267
Trichlorofluoromethane	ND		600	230	ug/m3			06/19/12 18:30	267
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		820	410	ug/m3			06/19/12 18:30	267
1,2,4-Trimethylbenzene	**1900**	**J**	3300	330	ug/m3			06/19/12 18:30	267
1,3,5-Trimethylbenzene	**880**		530	330	ug/m3			06/19/12 18:30	267
Vinyl acetate	ND		750	190	ug/m3			06/19/12 18:30	267
Vinyl chloride	ND		140	68	ug/m3			06/19/12 18:30	267
m,p-Xylene	**18000**		930	230	ug/m3			06/19/12 18:30	267
o-Xylene	**330**	**J**	460	230	ug/m3			06/19/12 18:30	267
Naphthalene	ND		2800	1100	ug/m3			06/19/12 18:30	267

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*06/19/12 18:30*	*267*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*06/19/12 18:30*	*267*
Toluene-d8 (Surr)	*106*		*70 - 130*		*06/19/12 18:30*	*267*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-07-20120606
Date Collected: 06/06/12 14:49
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-6
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**18**		0.020	0.0040	% v/v			06/12/12 17:49	1.98
Helium	ND		0.040	0.020	% v/v			06/12/12 17:49	1.98
Methane (TCD)	**12**		0.00040	0.00012	% v/v			06/12/12 17:49	1.98
Nitrogen	**66**		2.0	0.99	% v/v			06/12/12 17:49	1.98
Oxygen	**1.1**		0.40	0.059	% v/v			06/12/12 17:49	1.98

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**180000**		200	40	ppm v/v			06/12/12 17:49	1.98
Helium	ND		400	200	ppm v/v			06/12/12 17:49	1.98
Methane (TCD)	**120000**		4.0	1.2	ppm v/v			06/12/12 17:49	1.98
Nitrogen	**660000**		20000	9900	ppm v/v			06/12/12 17:49	1.98
Oxygen	**11000**		4000	590	ppm v/v			06/12/12 17:49	1.98

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1900	720	ppb v/v			06/19/12 15:28	2390
Benzene	ND		720	360	ppb v/v			06/19/12 15:28	2390
Benzyl chloride	ND		1900	600	ppb v/v			06/19/12 15:28	2390
Bromodichloromethane	ND		720	360	ppb v/v			06/19/12 15:28	2390
Bromoform	ND	*	960	480	ppb v/v			06/19/12 15:28	2390
Bromomethane	ND		1900	480	ppb v/v			06/19/12 15:28	2390
2-Butanone (MEK)	ND		1900	960	ppb v/v			06/19/12 15:28	2390
Carbon disulfide	ND		1900	480	ppb v/v			06/19/12 15:28	2390
Carbon tetrachloride	ND		1900	600	ppb v/v			06/19/12 15:28	2390
Chlorobenzene	ND		720	240	ppb v/v			06/19/12 15:28	2390
Dibromochloromethane	ND		960	240	ppb v/v			06/19/12 15:28	2390
Chloroethane	ND		1900	480	ppb v/v			06/19/12 15:28	2390
Chloroform	ND		720	240	ppb v/v			06/19/12 15:28	2390
Chloromethane	ND		1900	480	ppb v/v			06/19/12 15:28	2390
1,2-Dibromoethane (EDB)	ND		1900	480	ppb v/v			06/19/12 15:28	2390
1,2-Dichlorobenzene	ND		960	360	ppb v/v			06/19/12 15:28	2390
1,3-Dichlorobenzene	ND		960	360	ppb v/v			06/19/12 15:28	2390
1,4-Dichlorobenzene	ND		960	360	ppb v/v			06/19/12 15:28	2390
Dichlorodifluoromethane	ND		960	360	ppb v/v			06/19/12 15:28	2390
1,1-Dichloroethane	ND		720	360	ppb v/v			06/19/12 15:28	2390
1,2-Dichloroethane	ND		1900	720	ppb v/v			06/19/12 15:28	2390
1,1-Dichloroethene	ND		1900	480	ppb v/v			06/19/12 15:28	2390
cis-1,2-Dichloroethene	ND		960	480	ppb v/v			06/19/12 15:28	2390
trans-1,2-Dichloroethene	ND		960	480	ppb v/v			06/19/12 15:28	2390
1,2-Dichloropropane	ND		960	480	ppb v/v			06/19/12 15:28	2390
cis-1,3-Dichloropropene	ND		960	480	ppb v/v			06/19/12 15:28	2390
trans-1,3-Dichloropropene	ND		960	480	ppb v/v			06/19/12 15:28	2390
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		960	480	ppb v/v			06/19/12 15:28	2390
Ethylbenzene	ND		960	360	ppb v/v			06/19/12 15:28	2390
4-Ethyltoluene	ND		960	480	ppb v/v			06/19/12 15:28	2390
Hexachlorobutadiene	ND		960	480	ppb v/v			06/19/12 15:28	2390
2-Hexanone	**3700**		960	600	ppb v/v			06/19/12 15:28	2390
Methylene chloride	ND		960	480	ppb v/v			06/19/12 15:28	2390
4-Methyl-2-pentanone (MIBK)	ND		960	480	ppb v/v			06/19/12 15:28	2390
Styrene	ND		960	480	ppb v/v			06/19/12 15:28	2390
1,1,2,2-Tetrachloroethane	ND		960	240	ppb v/v			06/19/12 15:28	2390

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-07-20120606
Date Collected: 06/06/12 14:49
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-6
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		960	480	ppb v/v			06/19/12 15:28	2390
Toluene	ND		960	480	ppb v/v			06/19/12 15:28	2390
1,2,4-Trichlorobenzene	ND		6000	2400	ppb v/v			06/19/12 15:28	2390
1,1,1-Trichloroethane	ND		720	360	ppb v/v			06/19/12 15:28	2390
1,1,2-Trichloroethane	ND		960	480	ppb v/v			06/19/12 15:28	2390
Trichloroethene	ND		960	480	ppb v/v			06/19/12 15:28	2390
Trichlorofluoromethane	ND		960	360	ppb v/v			06/19/12 15:28	2390
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		960	480	ppb v/v			06/19/12 15:28	2390
1,2,4-Trimethylbenzene	ND		6000	600	ppb v/v			06/19/12 15:28	2390
1,3,5-Trimethylbenzene	ND		960	600	ppb v/v			06/19/12 15:28	2390
Vinyl acetate	ND		1900	480	ppb v/v			06/19/12 15:28	2390
Vinyl chloride	ND		480	240	ppb v/v			06/19/12 15:28	2390
m,p-Xylene	ND		1900	480	ppb v/v			06/19/12 15:28	2390
o-Xylene	ND		960	480	ppb v/v			06/19/12 15:28	2390
Naphthalene	ND		4800	1900	ppb v/v			06/19/12 15:28	2390

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		4500	1700	ug/m3			06/19/12 15:28	2390
Benzene	ND		2300	1100	ug/m3			06/19/12 15:28	2390
Benzyl chloride	ND		9900	3100	ug/m3			06/19/12 15:28	2390
Bromodichloromethane	ND		4800	2400	ug/m3			06/19/12 15:28	2390
Bromoform	ND	*	9900	4900	ug/m3			06/19/12 15:28	2390
Bromomethane	ND		7400	1900	ug/m3			06/19/12 15:28	2390
2-Butanone (MEK)	ND		5600	2800	ug/m3			06/19/12 15:28	2390
Carbon disulfide	ND		6000	1500	ug/m3			06/19/12 15:28	2390
Carbon tetrachloride	ND		12000	3800	ug/m3			06/19/12 15:28	2390
Chlorobenzene	ND		3300	1100	ug/m3			06/19/12 15:28	2390
Dibromochloromethane	ND		8100	2000	ug/m3			06/19/12 15:28	2390
Chloroethane	ND		5000	1300	ug/m3			06/19/12 15:28	2390
Chloroform	ND		3500	1200	ug/m3			06/19/12 15:28	2390
Chloromethane	ND		3900	990	ug/m3			06/19/12 15:28	2390
1,2-Dibromoethane (EDB)	ND		15000	3700	ug/m3			06/19/12 15:28	2390
1,2-Dichlorobenzene	ND		5700	2200	ug/m3			06/19/12 15:28	2390
1,3-Dichlorobenzene	ND		5700	2200	ug/m3			06/19/12 15:28	2390
1,4-Dichlorobenzene	ND		5700	2200	ug/m3			06/19/12 15:28	2390
Dichlorodifluoromethane	ND		4700	1800	ug/m3			06/19/12 15:28	2390
1,1-Dichloroethane	ND		2900	1500	ug/m3			06/19/12 15:28	2390
1,2-Dichloroethane	ND		7700	2900	ug/m3			06/19/12 15:28	2390
1,1-Dichloroethene	ND		7600	1900	ug/m3			06/19/12 15:28	2390
cis-1,2-Dichloroethene	ND		3800	1900	ug/m3			06/19/12 15:28	2390
trans-1,2-Dichloroethene	ND		3800	1900	ug/m3			06/19/12 15:28	2390
1,2-Dichloropropane	ND		4400	2200	ug/m3			06/19/12 15:28	2390
cis-1,3-Dichloropropene	ND		4300	2200	ug/m3			06/19/12 15:28	2390
trans-1,3-Dichloropropene	ND		4300	2200	ug/m3			06/19/12 15:28	2390
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		6700	3300	ug/m3			06/19/12 15:28	2390
Ethylbenzene	ND		4200	1600	ug/m3			06/19/12 15:28	2390
4-Ethyltoluene	ND		4700	2300	ug/m3			06/19/12 15:28	2390
Hexachlorobutadiene	ND		10000	5100	ug/m3			06/19/12 15:28	2390
2-Hexanone	**15000**		3900	2400	ug/m3			06/19/12 15:28	2390
Methylene chloride	ND		3300	1700	ug/m3			06/19/12 15:28	2390
4-Methyl-2-pentanone (MIBK)	ND		3900	2000	ug/m3			06/19/12 15:28	2390

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-07-20120606
Date Collected: 06/06/12 14:49
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-6
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		4100	2000	ug/m3			06/19/12 15:28	2390
1,1,2,2-Tetrachloroethane	ND		6600	1600	ug/m3			06/19/12 15:28	2390
Tetrachloroethene	ND		6500	3200	ug/m3			06/19/12 15:28	2390
Toluene	ND		3600	1800	ug/m3			06/19/12 15:28	2390
1,2,4-Trichlorobenzene	ND		44000	18000	ug/m3			06/19/12 15:28	2390
1,1,1-Trichloroethane	ND		3900	2000	ug/m3			06/19/12 15:28	2390
1,1,2-Trichloroethane	ND		5200	2600	ug/m3			06/19/12 15:28	2390
Trichloroethene	ND		5100	2600	ug/m3			06/19/12 15:28	2390
Trichlorofluoromethane	ND		5400	2000	ug/m3			06/19/12 15:28	2390
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7300	3700	ug/m3			06/19/12 15:28	2390
1,2,4-Trimethylbenzene	ND		29000	2900	ug/m3			06/19/12 15:28	2390
1,3,5-Trimethylbenzene	ND		4700	2900	ug/m3			06/19/12 15:28	2390
Vinyl acetate	ND		6700	1700	ug/m3			06/19/12 15:28	2390
Vinyl chloride	ND		1200	610	ug/m3			06/19/12 15:28	2390
m,p-Xylene	ND		8300	2100	ug/m3			06/19/12 15:28	2390
o-Xylene	ND		4200	2100	ug/m3			06/19/12 15:28	2390
Naphthalene	ND		25000	10000	ug/m3			06/19/12 15:28	2390

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*06/19/12 15:28*	*2390*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*06/19/12 15:28*	*2390*
Toluene-d8 (Surr)	*106*		*70 - 130*		*06/19/12 15:28*	*2390*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-08-20120606
Lab Sample ID: 340-2373-7
Date Collected: 06/06/12 15:27
Matrix: Air
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	**0.070**		0.021	0.0041	% v/v			06/12/12 18:12	2.06
Helium	**0.050**		0.041	0.021	% v/v			06/12/12 18:12	2.06
Methane (FID)	**0.34**		0.00041	0.00012	% v/v			06/12/12 18:12	2.06
Nitrogen	**86**		2.1	1.0	% v/v			06/12/12 18:12	2.06
Oxygen	**10**		0.41	0.062	% v/v			06/12/12 18:12	2.06

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	**700**		210	41	ppm v/v			06/12/12 18:12	2.06
Helium	**500**		410	210	ppm v/v			06/12/12 18:12	2.06
Methane (FID)	**3400**		4.1	1.2	ppm v/v			06/12/12 18:12	2.06
Nitrogen	**860000**		21000	10000	ppm v/v			06/12/12 18:12	2.06
Oxygen	**100000**		4100	620	ppm v/v			06/12/12 18:12	2.06

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**100**		59	22	ppb v/v			06/19/12 19:14	74
Benzene	**13**	**J**	22	11	ppb v/v			06/19/12 19:14	74
Benzyl chloride	ND		59	19	ppb v/v			06/19/12 19:14	74
Bromodichloromethane	ND		22	11	ppb v/v			06/19/12 19:14	74
Bromoform	ND	*	30	15	ppb v/v			06/19/12 19:14	74
Bromomethane	ND		59	15	ppb v/v			06/19/12 19:14	74
2-Butanone (MEK)	ND		59	30	ppb v/v			06/19/12 19:14	74
Carbon disulfide	**41**	**J**	59	15	ppb v/v			06/19/12 19:14	74
Carbon tetrachloride	ND		59	19	ppb v/v			06/19/12 19:14	74
Chlorobenzene	**20**	**J**	22	7.4	ppb v/v			06/19/12 19:14	74
Dibromochloromethane	ND		30	7.4	ppb v/v			06/19/12 19:14	74
Chloroethane	ND		59	15	ppb v/v			06/19/12 19:14	74
Chloroform	ND		22	7.4	ppb v/v			06/19/12 19:14	74
Chloromethane	ND		59	15	ppb v/v			06/19/12 19:14	74
1,2-Dibromoethane (EDB)	ND		59	15	ppb v/v			06/19/12 19:14	74
1,2-Dichlorobenzene	ND		30	11	ppb v/v			06/19/12 19:14	74
1,3-Dichlorobenzene	ND		30	11	ppb v/v			06/19/12 19:14	74
1,4-Dichlorobenzene	ND		30	11	ppb v/v			06/19/12 19:14	74
Dichlorodifluoromethane	ND		30	11	ppb v/v			06/19/12 19:14	74
1,1-Dichloroethane	ND		22	11	ppb v/v			06/19/12 19:14	74
1,2-Dichloroethane	ND		59	22	ppb v/v			06/19/12 19:14	74
1,1-Dichloroethene	ND		59	15	ppb v/v			06/19/12 19:14	74
cis-1,2-Dichloroethene	ND		30	15	ppb v/v			06/19/12 19:14	74
trans-1,2-Dichloroethene	ND		30	15	ppb v/v			06/19/12 19:14	74
1,2-Dichloropropane	ND		30	15	ppb v/v			06/19/12 19:14	74
cis-1,3-Dichloropropene	ND		30	15	ppb v/v			06/19/12 19:14	74
trans-1,3-Dichloropropene	ND		30	15	ppb v/v			06/19/12 19:14	74
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		30	15	ppb v/v			06/19/12 19:14	74
Ethylbenzene	**84**		30	11	ppb v/v			06/19/12 19:14	74
4-Ethyltoluene	**26**	**J**	30	15	ppb v/v			06/19/12 19:14	74
Hexachlorobutadiene	ND		30	15	ppb v/v			06/19/12 19:14	74
2-Hexanone	ND		30	19	ppb v/v			06/19/12 19:14	74
Methylene chloride	ND		30	15	ppb v/v			06/19/12 19:14	74
4-Methyl-2-pentanone (MIBK)	ND		30	15	ppb v/v			06/19/12 19:14	74
Styrene	ND		30	15	ppb v/v			06/19/12 19:14	74
1,1,2,2-Tetrachloroethane	ND		30	7.4	ppb v/v			06/19/12 19:14	74

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-08-20120606
Date Collected: 06/06/12 15:27
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-7
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		30	15	ppb v/v			06/19/12 19:14	74
Toluene	**1100**		30	15	ppb v/v			06/19/12 19:14	74
1,2,4-Trichlorobenzene	ND		190	74	ppb v/v			06/19/12 19:14	74
1,1,1-Trichloroethane	ND		22	11	ppb v/v			06/19/12 19:14	74
1,1,2-Trichloroethane	ND		30	15	ppb v/v			06/19/12 19:14	74
Trichloroethene	ND		30	15	ppb v/v			06/19/12 19:14	74
Trichlorofluoromethane	ND		30	11	ppb v/v			06/19/12 19:14	74
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		30	15	ppb v/v			06/19/12 19:14	74
1,2,4-Trimethylbenzene	**34**	**J**	190	19	ppb v/v			06/19/12 19:14	74
1,3,5-Trimethylbenzene	**23**	**J**	30	19	ppb v/v			06/19/12 19:14	74
Vinyl acetate	ND		59	15	ppb v/v			06/19/12 19:14	74
Vinyl chloride	ND		15	7.4	ppb v/v			06/19/12 19:14	74
m,p-Xylene	**320**		59	15	ppb v/v			06/19/12 19:14	74
o-Xylene	**95**		30	15	ppb v/v			06/19/12 19:14	74
Naphthalene	ND		150	59	ppb v/v			06/19/12 19:14	74

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**250**		140	53	ug/m3			06/19/12 19:14	74
Benzene	**40**	**J**	71	35	ug/m3			06/19/12 19:14	74
Benzyl chloride	ND		310	96	ug/m3			06/19/12 19:14	74
Bromodichloromethane	ND		150	74	ug/m3			06/19/12 19:14	74
Bromoform	ND	*	310	150	ug/m3			06/19/12 19:14	74
Bromomethane	ND		230	57	ug/m3			06/19/12 19:14	74
2-Butanone (MEK)	ND		170	87	ug/m3			06/19/12 19:14	74
Carbon disulfide	**130**	**J**	180	46	ug/m3			06/19/12 19:14	74
Carbon tetrachloride	ND		370	120	ug/m3			06/19/12 19:14	74
Chlorobenzene	**94**	**J**	100	34	ug/m3			06/19/12 19:14	74
Dibromochloromethane	ND		250	63	ug/m3			06/19/12 19:14	74
Chloroethane	ND		160	39	ug/m3			06/19/12 19:14	74
Chloroform	ND		110	36	ug/m3			06/19/12 19:14	74
Chloromethane	ND		120	31	ug/m3			06/19/12 19:14	74
1,2-Dibromoethane (EDB)	ND		450	110	ug/m3			06/19/12 19:14	74
1,2-Dichlorobenzene	ND		180	67	ug/m3			06/19/12 19:14	74
1,3-Dichlorobenzene	ND		180	67	ug/m3			06/19/12 19:14	74
1,4-Dichlorobenzene	ND		180	67	ug/m3			06/19/12 19:14	74
Dichlorodifluoromethane	ND		150	55	ug/m3			06/19/12 19:14	74
1,1-Dichloroethane	ND		90	45	ug/m3			06/19/12 19:14	74
1,2-Dichloroethane	ND		240	90	ug/m3			06/19/12 19:14	74
1,1-Dichloroethene	ND		230	59	ug/m3			06/19/12 19:14	74
cis-1,2-Dichloroethene	ND		120	59	ug/m3			06/19/12 19:14	74
trans-1,2-Dichloroethene	ND		120	59	ug/m3			06/19/12 19:14	74
1,2-Dichloropropane	ND		140	68	ug/m3			06/19/12 19:14	74
cis-1,3-Dichloropropene	ND		130	67	ug/m3			06/19/12 19:14	74
trans-1,3-Dichloropropene	ND		130	67	ug/m3			06/19/12 19:14	74
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		210	100	ug/m3			06/19/12 19:14	74
Ethylbenzene	**360**		130	48	ug/m3			06/19/12 19:14	74
4-Ethyltoluene	**130**	**J**	150	73	ug/m3			06/19/12 19:14	74
Hexachlorobutadiene	ND		320	160	ug/m3			06/19/12 19:14	74
2-Hexanone	ND		120	76	ug/m3			06/19/12 19:14	74
Methylene chloride	ND		100	51	ug/m3			06/19/12 19:14	74
4-Methyl-2-pentanone (MIBK)	ND		120	61	ug/m3			06/19/12 19:14	74

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-08-20120606
Date Collected: 06/06/12 15:27
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-7
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		130	63	ug/m3			06/19/12 19:14	74
1,1,2,2-Tetrachloroethane	ND		200	51	ug/m3			06/19/12 19:14	74
Tetrachloroethene	ND		200	100	ug/m3			06/19/12 19:14	74
Toluene	**4100**		110	56	ug/m3			06/19/12 19:14	74
1,2,4-Trichlorobenzene	ND		1400	550	ug/m3			06/19/12 19:14	74
1,1,1-Trichloroethane	ND		120	61	ug/m3			06/19/12 19:14	74
1,1,2-Trichloroethane	ND		160	81	ug/m3			06/19/12 19:14	74
Trichloroethene	ND		160	80	ug/m3			06/19/12 19:14	74
Trichlorofluoromethane	ND		170	62	ug/m3			06/19/12 19:14	74
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		230	110	ug/m3			06/19/12 19:14	74
1,2,4-Trimethylbenzene	**170**	**J**	910	91	ug/m3			06/19/12 19:14	74
1,3,5-Trimethylbenzene	**110**	**J**	150	91	ug/m3			06/19/12 19:14	74
Vinyl acetate	ND		210	52	ug/m3			06/19/12 19:14	74
Vinyl chloride	ND		38	19	ug/m3			06/19/12 19:14	74
m,p-Xylene	**1400**		260	64	ug/m3			06/19/12 19:14	74
o-Xylene	**410**		130	64	ug/m3			06/19/12 19:14	74
Naphthalene	ND		780	310	ug/m3			06/19/12 19:14	74

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*06/19/12 19:14*	*74*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*06/19/12 19:14*	*74*
Toluene-d8 (Surr)	*103*		*70 - 130*		*06/19/12 19:14*	*74*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-09-20120607
Date Collected: 06/07/12 11:16
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-8
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	**0.071**		0.021	0.0041	% v/v			06/12/12 18:30	2.06
Helium	**0.51**		0.041	0.021	% v/v			06/12/12 18:30	2.06
Methane (FID)	**0.00096**		0.00041	0.00012	% v/v			06/12/12 18:30	2.06
Nitrogen	**75**		2.1	1.0	% v/v			06/12/12 18:30	2.06
Oxygen	**20**		0.41	0.062	% v/v			06/12/12 18:30	2.06

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	**710**		210	41	ppm v/v			06/12/12 18:30	2.06
Helium	**5100**		410	210	ppm v/v			06/12/12 18:30	2.06
Methane (FID)	**9.6**		4.1	1.2	ppm v/v			06/12/12 18:30	2.06
Nitrogen	**750000**		21000	10000	ppm v/v			06/12/12 18:30	2.06
Oxygen	**200000**		4100	620	ppm v/v			06/12/12 18:30	2.06

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**27**		0.80	0.30	ppb v/v			06/19/12 20:04	1
Benzene	**18**		0.30	0.15	ppb v/v			06/19/12 20:04	1
Benzyl chloride	ND		0.80	0.25	ppb v/v			06/19/12 20:04	1
Bromodichloromethane	**0.23**	**J**	0.30	0.15	ppb v/v			06/19/12 20:04	1
Bromoform	ND	*	0.40	0.20	ppb v/v			06/19/12 20:04	1
Bromomethane	ND		0.80	0.20	ppb v/v			06/19/12 20:04	1
2-Butanone (MEK)	**6.9**		0.80	0.40	ppb v/v			06/19/12 20:04	1
Carbon disulfide	**14**		0.80	0.20	ppb v/v			06/19/12 20:04	1
Carbon tetrachloride	ND		0.80	0.25	ppb v/v			06/19/12 20:04	1
Chlorobenzene	ND		0.30	0.10	ppb v/v			06/19/12 20:04	1
Dibromochloromethane	ND		0.40	0.10	ppb v/v			06/19/12 20:04	1
Chloroethane	**0.45**	**J**	0.80	0.20	ppb v/v			06/19/12 20:04	1
Chloroform	**110**		1.7	0.57	ppb v/v			06/20/12 15:12	5.67
Chloromethane	**0.41**	**J**	0.80	0.20	ppb v/v			06/19/12 20:04	1
1,2-Dibromoethane (EDB)	ND		0.80	0.20	ppb v/v			06/19/12 20:04	1
1,2-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 20:04	1
1,3-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 20:04	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 20:04	1
Dichlorodifluoromethane	**0.52**		0.40	0.15	ppb v/v			06/19/12 20:04	1
1,1-Dichloroethane	ND		0.30	0.15	ppb v/v			06/19/12 20:04	1
1,2-Dichloroethane	ND		0.80	0.30	ppb v/v			06/19/12 20:04	1
1,1-Dichloroethene	ND		0.80	0.20	ppb v/v			06/19/12 20:04	1
cis-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 20:04	1
trans-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 20:04	1
1,2-Dichloropropane	ND		0.40	0.20	ppb v/v			06/19/12 20:04	1
cis-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/19/12 20:04	1
trans-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/19/12 20:04	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.20	ppb v/v			06/19/12 20:04	1
Ethylbenzene	**1.8**		0.40	0.15	ppb v/v			06/19/12 20:04	1
4-Ethyltoluene	**1.9**		0.40	0.20	ppb v/v			06/19/12 20:04	1
Hexachlorobutadiene	ND		0.40	0.20	ppb v/v			06/19/12 20:04	1
2-Hexanone	ND		0.40	0.25	ppb v/v			06/19/12 20:04	1
Methylene chloride	**3.4**		0.40	0.20	ppb v/v			06/19/12 20:04	1
4-Methyl-2-pentanone (MIBK)	**3.7**		0.40	0.20	ppb v/v			06/19/12 20:04	1
Styrene	ND		0.40	0.20	ppb v/v			06/19/12 20:04	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.10	ppb v/v			06/19/12 20:04	1

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-09-20120607
Date Collected: 06/07/12 11:16
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-8
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.40	0.20	ppb v/v			06/19/12 20:04	1
Toluene	**9.1**		0.40	0.20	ppb v/v			06/19/12 20:04	1
1,2,4-Trichlorobenzene	ND		2.5	1.0	ppb v/v			06/19/12 20:04	1
1,1,1-Trichloroethane	ND		0.30	0.15	ppb v/v			06/19/12 20:04	1
1,1,2-Trichloroethane	ND		0.40	0.20	ppb v/v			06/19/12 20:04	1
Trichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 20:04	1
Trichlorofluoromethane	**0.48**		0.40	0.15	ppb v/v			06/19/12 20:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.20	ppb v/v			06/19/12 20:04	1
1,2,4-Trimethylbenzene	**3.2**		2.5	0.25	ppb v/v			06/19/12 20:04	1
1,3,5-Trimethylbenzene	**1.0**		0.40	0.25	ppb v/v			06/19/12 20:04	1
Vinyl acetate	ND		0.80	0.20	ppb v/v			06/19/12 20:04	1
Vinyl chloride	ND		0.20	0.10	ppb v/v			06/19/12 20:04	1
m,p-Xylene	**6.1**		0.80	0.20	ppb v/v			06/19/12 20:04	1
o-Xylene	**1.9**		0.40	0.20	ppb v/v			06/19/12 20:04	1
Naphthalene	ND		2.0	0.80	ppb v/v			06/19/12 20:04	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**65**		1.9	0.71	ug/m3			06/19/12 20:04	1
Benzene	**57**		0.96	0.48	ug/m3			06/19/12 20:04	1
Benzyl chloride	ND		4.1	1.3	ug/m3			06/19/12 20:04	1
Bromodichloromethane	**1.5**	**J**	2.0	1.0	ug/m3			06/19/12 20:04	1
Bromoform	ND	*	4.1	2.1	ug/m3			06/19/12 20:04	1
Bromomethane	ND		3.1	0.78	ug/m3			06/19/12 20:04	1
2-Butanone (MEK)	**20**		2.4	1.2	ug/m3			06/19/12 20:04	1
Carbon disulfide	**44**		2.5	0.62	ug/m3			06/19/12 20:04	1
Carbon tetrachloride	ND		5.0	1.6	ug/m3			06/19/12 20:04	1
Chlorobenzene	ND		1.4	0.46	ug/m3			06/19/12 20:04	1
Dibromochloromethane	ND		3.4	0.85	ug/m3			06/19/12 20:04	1
Chloroethane	**1.2**	**J**	2.1	0.53	ug/m3			06/19/12 20:04	1
Chloroform	**540**		8.3	2.8	ug/m3			06/20/12 15:12	5.67
Chloromethane	**0.85**	**J**	1.7	0.41	ug/m3			06/19/12 20:04	1
1,2-Dibromoethane (EDB)	ND		6.1	1.5	ug/m3			06/19/12 20:04	1
1,2-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 20:04	1
1,3-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 20:04	1
1,4-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 20:04	1
Dichlorodifluoromethane	**2.6**		2.0	0.74	ug/m3			06/19/12 20:04	1
1,1-Dichloroethane	ND		1.2	0.61	ug/m3			06/19/12 20:04	1
1,2-Dichloroethane	ND		3.2	1.2	ug/m3			06/19/12 20:04	1
1,1-Dichloroethene	ND		3.2	0.79	ug/m3			06/19/12 20:04	1
cis-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/19/12 20:04	1
trans-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/19/12 20:04	1
1,2-Dichloropropane	ND		1.8	0.92	ug/m3			06/19/12 20:04	1
cis-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/19/12 20:04	1
trans-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/19/12 20:04	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8	1.4	ug/m3			06/19/12 20:04	1
Ethylbenzene	**8.0**		1.7	0.65	ug/m3			06/19/12 20:04	1
4-Ethyltoluene	**9.3**		2.0	0.98	ug/m3			06/19/12 20:04	1
Hexachlorobutadiene	ND		4.3	2.1	ug/m3			06/19/12 20:04	1
2-Hexanone	ND		1.6	1.0	ug/m3			06/19/12 20:04	1
Methylene chloride	**12**		1.4	0.69	ug/m3			06/19/12 20:04	1
4-Methyl-2-pentanone (MIBK)	**15**		1.6	0.82	ug/m3			06/19/12 20:04	1

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-09-20120607
Date Collected: 06/07/12 11:16
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-8
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.7	0.85	ug/m3			06/19/12 20:04	1
1,1,2,2-Tetrachloroethane	ND		2.7	0.69	ug/m3			06/19/12 20:04	1
Tetrachloroethene	ND		2.7	1.4	ug/m3			06/19/12 20:04	1
Toluene	**34**		1.5	0.75	ug/m3			06/19/12 20:04	1
1,2,4-Trichlorobenzene	ND		19	7.4	ug/m3			06/19/12 20:04	1
1,1,1-Trichloroethane	ND		1.6	0.82	ug/m3			06/19/12 20:04	1
1,1,2-Trichloroethane	ND		2.2	1.1	ug/m3			06/19/12 20:04	1
Trichloroethene	ND		2.1	1.1	ug/m3			06/19/12 20:04	1
Trichlorofluoromethane	**2.7**		2.2	0.84	ug/m3			06/19/12 20:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.5	ug/m3			06/19/12 20:04	1
1,2,4-Trimethylbenzene	**16**		12	1.2	ug/m3			06/19/12 20:04	1
1,3,5-Trimethylbenzene	**5.0**		2.0	1.2	ug/m3			06/19/12 20:04	1
Vinyl acetate	ND		2.8	0.70	ug/m3			06/19/12 20:04	1
Vinyl chloride	ND		0.51	0.26	ug/m3			06/19/12 20:04	1
m,p-Xylene	**26**		3.5	0.87	ug/m3			06/19/12 20:04	1
o-Xylene	**8.1**		1.7	0.87	ug/m3			06/19/12 20:04	1
Naphthalene	ND		10	4.2	ug/m3			06/19/12 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*		*06/19/12 20:04*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*06/20/12 15:12*	*5.67*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*06/19/12 20:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/20/12 15:12*	*5.67*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/19/12 20:04*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*06/20/12 15:12*	*5.67*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-01-20120607
Date Collected: 06/07/12 11:49
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-9
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	**0.015**	**J**	0.020	0.0039	% v/v			06/12/12 18:51	1.95
Helium	ND		0.039	0.020	% v/v			06/12/12 18:51	1.95
Methane (FID)	**0.00026**	**J**	0.00039	0.00012	% v/v			06/12/12 18:51	1.95
Nitrogen	**77**		2.0	0.98	% v/v			06/12/12 18:51	1.95
Oxygen	**19**		0.39	0.059	% v/v			06/12/12 18:51	1.95

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	**150**	**J**	200	39	ppm v/v			06/12/12 18:51	1.95
Helium	ND		390	200	ppm v/v			06/12/12 18:51	1.95
Methane (FID)	**2.6**	**J**	3.9	1.2	ppm v/v			06/12/12 18:51	1.95
Nitrogen	**770000**		20000	9800	ppm v/v			06/12/12 18:51	1.95
Oxygen	**190000**		3900	590	ppm v/v			06/12/12 18:51	1.95

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**18**		0.80	0.30	ppb v/v			06/19/12 20:51	1
Benzene	**5.7**		0.30	0.15	ppb v/v			06/19/12 20:51	1
Benzyl chloride	ND		0.80	0.25	ppb v/v			06/19/12 20:51	1
Bromodichloromethane	ND		0.30	0.15	ppb v/v			06/19/12 20:51	1
Bromoform	ND	*	0.40	0.20	ppb v/v			06/19/12 20:51	1
Bromomethane	ND		0.80	0.20	ppb v/v			06/19/12 20:51	1
2-Butanone (MEK)	**3.7**		0.80	0.40	ppb v/v			06/19/12 20:51	1
Carbon disulfide	**1.8**		0.80	0.20	ppb v/v			06/19/12 20:51	1
Carbon tetrachloride	ND		0.80	0.25	ppb v/v			06/19/12 20:51	1
Chlorobenzene	ND		0.30	0.10	ppb v/v			06/19/12 20:51	1
Dibromochloromethane	ND		0.40	0.10	ppb v/v			06/19/12 20:51	1
Chloroethane	ND		0.80	0.20	ppb v/v			06/19/12 20:51	1
Chloroform	**1.3**		0.30	0.10	ppb v/v			06/19/12 20:51	1
Chloromethane	**0.31**	**J**	0.80	0.20	ppb v/v			06/19/12 20:51	1
1,2-Dibromoethane (EDB)	ND		0.80	0.20	ppb v/v			06/19/12 20:51	1
1,2-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 20:51	1
1,3-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 20:51	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 20:51	1
Dichlorodifluoromethane	**0.57**		0.40	0.15	ppb v/v			06/19/12 20:51	1
1,1-Dichloroethane	ND		0.30	0.15	ppb v/v			06/19/12 20:51	1
1,2-Dichloroethane	ND		0.80	0.30	ppb v/v			06/19/12 20:51	1
1,1-Dichloroethene	ND		0.80	0.20	ppb v/v			06/19/12 20:51	1
cis-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 20:51	1
trans-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 20:51	1
1,2-Dichloropropane	ND		0.40	0.20	ppb v/v			06/19/12 20:51	1
cis-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/19/12 20:51	1
trans-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/19/12 20:51	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.20	ppb v/v			06/19/12 20:51	1
Ethylbenzene	**0.50**		0.40	0.15	ppb v/v			06/19/12 20:51	1
4-Ethyltoluene	**0.41**		0.40	0.20	ppb v/v			06/19/12 20:51	1
Hexachlorobutadiene	ND		0.40	0.20	ppb v/v			06/19/12 20:51	1
2-Hexanone	ND		0.40	0.25	ppb v/v			06/19/12 20:51	1
Methylene chloride	ND		0.40	0.20	ppb v/v			06/19/12 20:51	1
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20	ppb v/v			06/19/12 20:51	1
Styrene	ND		0.40	0.20	ppb v/v			06/19/12 20:51	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.10	ppb v/v			06/19/12 20:51	1

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-01-20120607
Date Collected: 06/07/12 11:49
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-9
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**1.5**		0.40	0.20	ppb v/v			06/19/12 20:51	1
Toluene	**2.2**		0.40	0.20	ppb v/v			06/19/12 20:51	1
1,2,4-Trichlorobenzene	ND		2.5	1.0	ppb v/v			06/19/12 20:51	1
1,1,1-Trichloroethane	ND		0.30	0.15	ppb v/v			06/19/12 20:51	1
1,1,2-Trichloroethane	ND		0.40	0.20	ppb v/v			06/19/12 20:51	1
Trichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 20:51	1
Trichlorofluoromethane	**2.0**		0.40	0.15	ppb v/v			06/19/12 20:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.22**	**J**	0.40	0.20	ppb v/v			06/19/12 20:51	1
1,2,4-Trimethylbenzene	**0.71**	**J**	2.5	0.25	ppb v/v			06/19/12 20:51	1
1,3,5-Trimethylbenzene	ND		0.40	0.25	ppb v/v			06/19/12 20:51	1
Vinyl acetate	ND		0.80	0.20	ppb v/v			06/19/12 20:51	1
Vinyl chloride	ND		0.20	0.10	ppb v/v			06/19/12 20:51	1
m,p-Xylene	**1.6**		0.80	0.20	ppb v/v			06/19/12 20:51	1
o-Xylene	**0.42**		0.40	0.20	ppb v/v			06/19/12 20:51	1
Naphthalene	**3.0**		2.0	0.80	ppb v/v			06/19/12 20:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**44**		1.9	0.71	ug/m3			06/19/12 20:51	1
Benzene	**18**		0.96	0.48	ug/m3			06/19/12 20:51	1
Benzyl chloride	ND		4.1	1.3	ug/m3			06/19/12 20:51	1
Bromodichloromethane	ND		2.0	1.0	ug/m3			06/19/12 20:51	1
Bromoform	ND	*	4.1	2.1	ug/m3			06/19/12 20:51	1
Bromomethane	ND		3.1	0.78	ug/m3			06/19/12 20:51	1
2-Butanone (MEK)	**11**		2.4	1.2	ug/m3			06/19/12 20:51	1
Carbon disulfide	**5.7**		2.5	0.62	ug/m3			06/19/12 20:51	1
Carbon tetrachloride	ND		5.0	1.6	ug/m3			06/19/12 20:51	1
Chlorobenzene	ND		1.4	0.46	ug/m3			06/19/12 20:51	1
Dibromochloromethane	ND		3.4	0.85	ug/m3			06/19/12 20:51	1
Chloroethane	ND		2.1	0.53	ug/m3			06/19/12 20:51	1
Chloroform	**6.4**		1.5	0.49	ug/m3			06/19/12 20:51	1
Chloromethane	**0.65**	**J**	1.7	0.41	ug/m3			06/19/12 20:51	1
1,2-Dibromoethane (EDB)	ND		6.1	1.5	ug/m3			06/19/12 20:51	1
1,2-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 20:51	1
1,3-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 20:51	1
1,4-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 20:51	1
Dichlorodifluoromethane	**2.8**		2.0	0.74	ug/m3			06/19/12 20:51	1
1,1-Dichloroethane	ND		1.2	0.61	ug/m3			06/19/12 20:51	1
1,2-Dichloroethane	ND		3.2	1.2	ug/m3			06/19/12 20:51	1
1,1-Dichloroethene	ND		3.2	0.79	ug/m3			06/19/12 20:51	1
cis-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/19/12 20:51	1
trans-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/19/12 20:51	1
1,2-Dichloropropane	ND		1.8	0.92	ug/m3			06/19/12 20:51	1
cis-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/19/12 20:51	1
trans-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/19/12 20:51	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8	1.4	ug/m3			06/19/12 20:51	1
Ethylbenzene	**2.2**		1.7	0.65	ug/m3			06/19/12 20:51	1
4-Ethyltoluene	**2.0**		2.0	0.98	ug/m3			06/19/12 20:51	1
Hexachlorobutadiene	ND		4.3	2.1	ug/m3			06/19/12 20:51	1
2-Hexanone	ND		1.6	1.0	ug/m3			06/19/12 20:51	1
Methylene chloride	ND		1.4	0.69	ug/m3			06/19/12 20:51	1

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-01-20120607
Date Collected: 06/07/12 11:49
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-9
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		1.6	0.82	ug/m3			06/19/12 20:51	1
Styrene	ND		1.7	0.85	ug/m3			06/19/12 20:51	1
1,1,2,2-Tetrachloroethane	ND		2.7	0.69	ug/m3			06/19/12 20:51	1
Tetrachloroethene	**9.9**		2.7	1.4	ug/m3			06/19/12 20:51	1
Toluene	**8.4**		1.5	0.75	ug/m3			06/19/12 20:51	1
1,2,4-Trichlorobenzene	ND		19	7.4	ug/m3			06/19/12 20:51	1
1,1,1-Trichloroethane	ND		1.6	0.82	ug/m3			06/19/12 20:51	1
1,1,2-Trichloroethane	ND		2.2	1.1	ug/m3			06/19/12 20:51	1
Trichloroethene	ND		2.1	1.1	ug/m3			06/19/12 20:51	1
Trichlorofluoromethane	**11**		2.2	0.84	ug/m3			06/19/12 20:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.7**	**J**	3.1	1.5	ug/m3			06/19/12 20:51	1
1,2,4-Trimethylbenzene	**3.5**	**J**	12	1.2	ug/m3			06/19/12 20:51	1
1,3,5-Trimethylbenzene	ND		2.0	1.2	ug/m3			06/19/12 20:51	1
Vinyl acetate	ND		2.8	0.70	ug/m3			06/19/12 20:51	1
Vinyl chloride	ND		0.51	0.26	ug/m3			06/19/12 20:51	1
m,p-Xylene	**6.7**		3.5	0.87	ug/m3			06/19/12 20:51	1
o-Xylene	**1.8**		1.7	0.87	ug/m3			06/19/12 20:51	1
Naphthalene	**16**		10	4.2	ug/m3			06/19/12 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*06/19/12 20:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*06/19/12 20:51*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/19/12 20:51*	*1*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: TB-20120607
Date Collected: 06/07/12 08:00
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-10
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	ND		0.010	0.0020	% v/v			06/12/12 19:10	1
Helium	ND		0.020	0.010	% v/v			06/12/12 19:10	1
Methane (FID)	**0.00014**	**J**	0.00020	0.000060	% v/v			06/12/12 19:10	1
Nitrogen	**97**		1.0	0.50	% v/v			06/12/12 19:10	1
Oxygen	ND		0.20	0.030	% v/v			06/12/12 19:10	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	ND		100	20	ppm v/v			06/12/12 19:10	1
Helium	ND		200	100	ppm v/v			06/12/12 19:10	1
Methane (FID)	**1.4**	**J**	2.0	0.60	ppm v/v			06/12/12 19:10	1
Nitrogen	**970000**		10000	5000	ppm v/v			06/12/12 19:10	1
Oxygen	ND		2000	300	ppm v/v			06/12/12 19:10	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.80	0.30	ppb v/v			06/20/12 14:29	1
Benzene	ND		0.30	0.15	ppb v/v			06/20/12 14:29	1
Benzyl chloride	ND		0.80	0.25	ppb v/v			06/20/12 14:29	1
Bromodichloromethane	ND		0.30	0.15	ppb v/v			06/20/12 14:29	1
Bromoform	ND	*	0.40	0.20	ppb v/v			06/20/12 14:29	1
Bromomethane	ND		0.80	0.20	ppb v/v			06/20/12 14:29	1
2-Butanone (MEK)	**0.42**	**J**	0.80	0.40	ppb v/v			06/20/12 14:29	1
Carbon disulfide	ND		0.80	0.20	ppb v/v			06/20/12 14:29	1
Carbon tetrachloride	ND		0.80	0.25	ppb v/v			06/20/12 14:29	1
Chlorobenzene	ND		0.30	0.10	ppb v/v			06/20/12 14:29	1
Dibromochloromethane	ND		0.40	0.10	ppb v/v			06/20/12 14:29	1
Chloroethane	ND		0.80	0.20	ppb v/v			06/20/12 14:29	1
Chloroform	ND		0.30	0.10	ppb v/v			06/20/12 14:29	1
Chloromethane	ND		0.80	0.20	ppb v/v			06/20/12 14:29	1
1,2-Dibromoethane (EDB)	ND		0.80	0.20	ppb v/v			06/20/12 14:29	1
1,2-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/20/12 14:29	1
1,3-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/20/12 14:29	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/20/12 14:29	1
Dichlorodifluoromethane	ND		0.40	0.15	ppb v/v			06/20/12 14:29	1
1,1-Dichloroethane	ND		0.30	0.15	ppb v/v			06/20/12 14:29	1
1,2-Dichloroethane	ND		0.80	0.30	ppb v/v			06/20/12 14:29	1
1,1-Dichloroethene	ND		0.80	0.20	ppb v/v			06/20/12 14:29	1
cis-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
trans-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
1,2-Dichloropropane	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
cis-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
trans-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
Ethylbenzene	ND		0.40	0.15	ppb v/v			06/20/12 14:29	1
4-Ethyltoluene	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
Hexachlorobutadiene	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
2-Hexanone	ND		0.40	0.25	ppb v/v			06/20/12 14:29	1
Methylene chloride	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
Styrene	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.10	ppb v/v			06/20/12 14:29	1

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: TB-20120607
Date Collected: 06/07/12 08:00
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-10
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
Toluene	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
1,2,4-Trichlorobenzene	ND		2.5	1.0	ppb v/v			06/20/12 14:29	1
1,1,1-Trichloroethane	ND		0.30	0.15	ppb v/v			06/20/12 14:29	1
1,1,2-Trichloroethane	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
Trichloroethene	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
Trichlorofluoromethane	ND		0.40	0.15	ppb v/v			06/20/12 14:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
1,2,4-Trimethylbenzene	ND		2.5	0.25	ppb v/v			06/20/12 14:29	1
1,3,5-Trimethylbenzene	ND		0.40	0.25	ppb v/v			06/20/12 14:29	1
Vinyl acetate	ND		0.80	0.20	ppb v/v			06/20/12 14:29	1
Vinyl chloride	ND		0.20	0.10	ppb v/v			06/20/12 14:29	1
m,p-Xylene	ND		0.80	0.20	ppb v/v			06/20/12 14:29	1
o-Xylene	ND		0.40	0.20	ppb v/v			06/20/12 14:29	1
Naphthalene	ND		2.0	0.80	ppb v/v			06/20/12 14:29	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1.9	0.71	ug/m3			06/20/12 14:29	1
Benzene	ND		0.96	0.48	ug/m3			06/20/12 14:29	1
Benzyl chloride	ND		4.1	1.3	ug/m3			06/20/12 14:29	1
Bromodichloromethane	ND		2.0	1.0	ug/m3			06/20/12 14:29	1
Bromoform	ND	*	4.1	2.1	ug/m3			06/20/12 14:29	1
Bromomethane	ND		3.1	0.78	ug/m3			06/20/12 14:29	1
2-Butanone (MEK)	**1.2**	**J**	2.4	1.2	ug/m3			06/20/12 14:29	1
Carbon disulfide	ND		2.5	0.62	ug/m3			06/20/12 14:29	1
Carbon tetrachloride	ND		5.0	1.6	ug/m3			06/20/12 14:29	1
Chlorobenzene	ND		1.4	0.46	ug/m3			06/20/12 14:29	1
Dibromochloromethane	ND		3.4	0.85	ug/m3			06/20/12 14:29	1
Chloroethane	ND		2.1	0.53	ug/m3			06/20/12 14:29	1
Chloroform	ND		1.5	0.49	ug/m3			06/20/12 14:29	1
Chloromethane	ND		1.7	0.41	ug/m3			06/20/12 14:29	1
1,2-Dibromoethane (EDB)	ND		6.1	1.5	ug/m3			06/20/12 14:29	1
1,2-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/20/12 14:29	1
1,3-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/20/12 14:29	1
1,4-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/20/12 14:29	1
Dichlorodifluoromethane	ND		2.0	0.74	ug/m3			06/20/12 14:29	1
1,1-Dichloroethane	ND		1.2	0.61	ug/m3			06/20/12 14:29	1
1,2-Dichloroethane	ND		3.2	1.2	ug/m3			06/20/12 14:29	1
1,1-Dichloroethene	ND		3.2	0.79	ug/m3			06/20/12 14:29	1
cis-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/20/12 14:29	1
trans-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/20/12 14:29	1
1,2-Dichloropropane	ND		1.8	0.92	ug/m3			06/20/12 14:29	1
cis-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/20/12 14:29	1
trans-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/20/12 14:29	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8	1.4	ug/m3			06/20/12 14:29	1
Ethylbenzene	ND		1.7	0.65	ug/m3			06/20/12 14:29	1
4-Ethyltoluene	ND		2.0	0.98	ug/m3			06/20/12 14:29	1
Hexachlorobutadiene	ND		4.3	2.1	ug/m3			06/20/12 14:29	1
2-Hexanone	ND		1.6	1.0	ug/m3			06/20/12 14:29	1
Methylene chloride	ND		1.4	0.69	ug/m3			06/20/12 14:29	1
4-Methyl-2-pentanone (MIBK)	ND		1.6	0.82	ug/m3			06/20/12 14:29	1

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: TB-20120607
Date Collected: 06/07/12 08:00
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-10
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.7	0.85	ug/m3			06/20/12 14:29	1
1,1,2,2-Tetrachloroethane	ND		2.7	0.69	ug/m3			06/20/12 14:29	1
Tetrachloroethene	ND		2.7	1.4	ug/m3			06/20/12 14:29	1
Toluene	ND		1.5	0.75	ug/m3			06/20/12 14:29	1
1,2,4-Trichlorobenzene	ND		19	7.4	ug/m3			06/20/12 14:29	1
1,1,1-Trichloroethane	ND		1.6	0.82	ug/m3			06/20/12 14:29	1
1,1,2-Trichloroethane	ND		2.2	1.1	ug/m3			06/20/12 14:29	1
Trichloroethene	ND		2.1	1.1	ug/m3			06/20/12 14:29	1
Trichlorofluoromethane	ND		2.2	0.84	ug/m3			06/20/12 14:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.5	ug/m3			06/20/12 14:29	1
1,2,4-Trimethylbenzene	ND		12	1.2	ug/m3			06/20/12 14:29	1
1,3,5-Trimethylbenzene	ND		2.0	1.2	ug/m3			06/20/12 14:29	1
Vinyl acetate	ND		2.8	0.70	ug/m3			06/20/12 14:29	1
Vinyl chloride	ND		0.51	0.26	ug/m3			06/20/12 14:29	1
m,p-Xylene	ND		3.5	0.87	ug/m3			06/20/12 14:29	1
o-Xylene	ND		1.7	0.87	ug/m3			06/20/12 14:29	1
Naphthalene	ND		10	4.2	ug/m3			06/20/12 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*06/20/12 14:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/20/12 14:29*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/20/12 14:29*	*1*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-10-20120607
Date Collected: 06/07/12 09:10
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-11
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**18**		0.020	0.0040	% v/v			06/12/12 19:29	2.01
Helium	ND		0.040	0.020	% v/v			06/12/12 19:29	2.01
Methane (FID)	**0.19**		0.00040	0.00012	% v/v			06/12/12 19:29	2.01
Nitrogen	**77**		2.0	1.0	% v/v			06/12/12 19:29	2.01
Oxygen	**1.7**		0.40	0.060	% v/v			06/12/12 19:29	2.01

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**180000**		200	40	ppm v/v			06/12/12 19:29	2.01
Helium	ND		400	200	ppm v/v			06/12/12 19:29	2.01
Methane (FID)	**1900**		4.0	1.2	ppm v/v			06/12/12 19:29	2.01
Nitrogen	**770000**		20000	10000	ppm v/v			06/12/12 19:29	2.01
Oxygen	**17000**		4000	600	ppm v/v			06/12/12 19:29	2.01

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**24**		2.0	0.76	ppb v/v			06/19/12 22:19	2.52
Benzene	**140**		0.76	0.38	ppb v/v			06/19/12 22:19	2.52
Benzyl chloride	ND		2.0	0.63	ppb v/v			06/19/12 22:19	2.52
Bromodichloromethane	ND		0.76	0.38	ppb v/v			06/19/12 22:19	2.52
Bromoform	ND	*	1.0	0.50	ppb v/v			06/19/12 22:19	2.52
Bromomethane	ND		2.0	0.50	ppb v/v			06/19/12 22:19	2.52
2-Butanone (MEK)	**4.6**		2.0	1.0	ppb v/v			06/19/12 22:19	2.52
Carbon disulfide	**4.6**		2.0	0.50	ppb v/v			06/19/12 22:19	2.52
Carbon tetrachloride	ND		2.0	0.63	ppb v/v			06/19/12 22:19	2.52
Chlorobenzene	ND		0.76	0.25	ppb v/v			06/19/12 22:19	2.52
Dibromochloromethane	ND		1.0	0.25	ppb v/v			06/19/12 22:19	2.52
Chloroethane	ND		2.0	0.50	ppb v/v			06/19/12 22:19	2.52
Chloroform	**0.51**	**J**	0.76	0.25	ppb v/v			06/19/12 22:19	2.52
Chloromethane	**0.56**	**J**	2.0	0.50	ppb v/v			06/19/12 22:19	2.52
1,2-Dibromoethane (EDB)	ND		2.0	0.50	ppb v/v			06/19/12 22:19	2.52
1,2-Dichlorobenzene	ND		1.0	0.38	ppb v/v			06/19/12 22:19	2.52
1,3-Dichlorobenzene	ND		1.0	0.38	ppb v/v			06/19/12 22:19	2.52
1,4-Dichlorobenzene	ND		1.0	0.38	ppb v/v			06/19/12 22:19	2.52
Dichlorodifluoromethane	**0.75**	**J**	1.0	0.38	ppb v/v			06/19/12 22:19	2.52
1,1-Dichloroethane	ND		0.76	0.38	ppb v/v			06/19/12 22:19	2.52
1,2-Dichloroethane	ND		2.0	0.76	ppb v/v			06/19/12 22:19	2.52
1,1-Dichloroethene	ND		2.0	0.50	ppb v/v			06/19/12 22:19	2.52
cis-1,2-Dichloroethene	ND		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
trans-1,2-Dichloroethene	ND		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
1,2-Dichloropropane	ND		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
cis-1,3-Dichloropropene	ND		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
trans-1,3-Dichloropropene	ND		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
Ethylbenzene	**6.7**		1.0	0.38	ppb v/v			06/19/12 22:19	2.52
4-Ethyltoluene	**8.7**		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
Hexachlorobutadiene	ND		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
2-Hexanone	ND		1.0	0.63	ppb v/v			06/19/12 22:19	2.52
Methylene chloride	**0.68**	**J**	1.0	0.50	ppb v/v			06/19/12 22:19	2.52
4-Methyl-2-pentanone (MIBK)	**7.2**		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
Styrene	ND		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ppb v/v			06/19/12 22:19	2.52

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-10-20120607
Date Collected: 06/07/12 09:10
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-11
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
Toluene	**26**		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
1,2,4-Trichlorobenzene	ND		6.3	2.5	ppb v/v			06/19/12 22:19	2.52
1,1,1-Trichloroethane	ND		0.76	0.38	ppb v/v			06/19/12 22:19	2.52
1,1,2-Trichloroethane	ND		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
Trichloroethene	ND		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
Trichlorofluoromethane	**10**		1.0	0.38	ppb v/v			06/19/12 22:19	2.52
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
1,2,4-Trimethylbenzene	**13**		6.3	0.63	ppb v/v			06/19/12 22:19	2.52
1,3,5-Trimethylbenzene	**4.1**		1.0	0.63	ppb v/v			06/19/12 22:19	2.52
Vinyl acetate	ND		2.0	0.50	ppb v/v			06/19/12 22:19	2.52
Vinyl chloride	ND		0.50	0.25	ppb v/v			06/19/12 22:19	2.52
m,p-Xylene	**27**		2.0	0.50	ppb v/v			06/19/12 22:19	2.52
o-Xylene	**9.1**		1.0	0.50	ppb v/v			06/19/12 22:19	2.52
Naphthalene	ND		5.0	2.0	ppb v/v			06/19/12 22:19	2.52

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**57**		4.8	1.8	ug/m3			06/19/12 22:19	2.52
Benzene	**440**		2.4	1.2	ug/m3			06/19/12 22:19	2.52
Benzyl chloride	ND		10	3.3	ug/m3			06/19/12 22:19	2.52
Bromodichloromethane	ND		5.1	2.5	ug/m3			06/19/12 22:19	2.52
Bromoform	ND	*	10	5.2	ug/m3			06/19/12 22:19	2.52
Bromomethane	ND		7.8	2.0	ug/m3			06/19/12 22:19	2.52
2-Butanone (MEK)	**14**		5.9	3.0	ug/m3			06/19/12 22:19	2.52
Carbon disulfide	**14**		6.3	1.6	ug/m3			06/19/12 22:19	2.52
Carbon tetrachloride	ND		13	4.0	ug/m3			06/19/12 22:19	2.52
Chlorobenzene	ND		3.5	1.2	ug/m3			06/19/12 22:19	2.52
Dibromochloromethane	ND		8.6	2.1	ug/m3			06/19/12 22:19	2.52
Chloroethane	ND		5.3	1.3	ug/m3			06/19/12 22:19	2.52
Chloroform	**2.5**	**J**	3.7	1.2	ug/m3			06/19/12 22:19	2.52
Chloromethane	**1.2**	**J**	4.2	1.0	ug/m3			06/19/12 22:19	2.52
1,2-Dibromoethane (EDB)	ND		15	3.9	ug/m3			06/19/12 22:19	2.52
1,2-Dichlorobenzene	ND		6.1	2.3	ug/m3			06/19/12 22:19	2.52
1,3-Dichlorobenzene	ND		6.1	2.3	ug/m3			06/19/12 22:19	2.52
1,4-Dichlorobenzene	ND		6.1	2.3	ug/m3			06/19/12 22:19	2.52
Dichlorodifluoromethane	**3.7**	**J**	5.0	1.9	ug/m3			06/19/12 22:19	2.52
1,1-Dichloroethane	ND		3.1	1.5	ug/m3			06/19/12 22:19	2.52
1,2-Dichloroethane	ND		8.2	3.1	ug/m3			06/19/12 22:19	2.52
1,1-Dichloroethene	ND		8.0	2.0	ug/m3			06/19/12 22:19	2.52
cis-1,2-Dichloroethene	ND		4.0	2.0	ug/m3			06/19/12 22:19	2.52
trans-1,2-Dichloroethene	ND		4.0	2.0	ug/m3			06/19/12 22:19	2.52
1,2-Dichloropropane	ND		4.7	2.3	ug/m3			06/19/12 22:19	2.52
cis-1,3-Dichloropropene	ND		4.6	2.3	ug/m3			06/19/12 22:19	2.52
trans-1,3-Dichloropropene	ND		4.6	2.3	ug/m3			06/19/12 22:19	2.52
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		7.0	3.5	ug/m3			06/19/12 22:19	2.52
Ethylbenzene	**29**		4.4	1.6	ug/m3			06/19/12 22:19	2.52
4-Ethyltoluene	**43**		5.0	2.5	ug/m3			06/19/12 22:19	2.52
Hexachlorobutadiene	ND		11	5.4	ug/m3			06/19/12 22:19	2.52
2-Hexanone	ND		4.1	2.6	ug/m3			06/19/12 22:19	2.52
Methylene chloride	**2.4**	**J**	3.5	1.8	ug/m3			06/19/12 22:19	2.52
4-Methyl-2-pentanone (MIBK)	**30**		4.1	2.1	ug/m3			06/19/12 22:19	2.52

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-10-20120607
Date Collected: 06/07/12 09:10
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-11
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		4.3	2.1	ug/m3			06/19/12 22:19	2.52
1,1,2,2-Tetrachloroethane	ND		6.9	1.7	ug/m3			06/19/12 22:19	2.52
Tetrachloroethene	ND		6.8	3.4	ug/m3			06/19/12 22:19	2.52
Toluene	**99**		3.8	1.9	ug/m3			06/19/12 22:19	2.52
1,2,4-Trichlorobenzene	ND		47	19	ug/m3			06/19/12 22:19	2.52
1,1,1-Trichloroethane	ND		4.1	2.1	ug/m3			06/19/12 22:19	2.52
1,1,2-Trichloroethane	ND		5.5	2.8	ug/m3			06/19/12 22:19	2.52
Trichloroethene	ND		5.4	2.7	ug/m3			06/19/12 22:19	2.52
Trichlorofluoromethane	**57**		5.7	2.1	ug/m3			06/19/12 22:19	2.52
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.7	3.9	ug/m3			06/19/12 22:19	2.52
1,2,4-Trimethylbenzene	**63**		31	3.1	ug/m3			06/19/12 22:19	2.52
1,3,5-Trimethylbenzene	**20**		5.0	3.1	ug/m3			06/19/12 22:19	2.52
Vinyl acetate	ND		7.1	1.8	ug/m3			06/19/12 22:19	2.52
Vinyl chloride	ND		1.3	0.64	ug/m3			06/19/12 22:19	2.52
m,p-Xylene	**120**		8.8	2.2	ug/m3			06/19/12 22:19	2.52
o-Xylene	**40**		4.4	2.2	ug/m3			06/19/12 22:19	2.52
Naphthalene	ND		26	11	ug/m3			06/19/12 22:19	2.52

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*		*06/19/12 22:19*	*2.52*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*06/19/12 22:19*	*2.52*
Toluene-d8 (Surr)	*103*		*70 - 130*		*06/19/12 22:19*	*2.52*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-100-20120607
Date Collected: 06/07/12 09:11
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-12
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**18**		0.021	0.0042	% v/v			06/12/12 19:46	2.09
Helium	ND		0.042	0.021	% v/v			06/12/12 19:46	2.09
Methane (FID)	**0.19**		0.00042	0.00013	% v/v			06/12/12 19:46	2.09
Nitrogen	**77**		2.1	1.0	% v/v			06/12/12 19:46	2.09
Oxygen	**1.3**		0.42	0.063	% v/v			06/12/12 19:46	2.09

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**180000**		210	42	ppm v/v			06/12/12 19:46	2.09
Helium	ND		420	210	ppm v/v			06/12/12 19:46	2.09
Methane (FID)	**1900**		4.2	1.3	ppm v/v			06/12/12 19:46	2.09
Nitrogen	**770000**		21000	10000	ppm v/v			06/12/12 19:46	2.09
Oxygen	**13000**		4200	630	ppm v/v			06/12/12 19:46	2.09

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**25**		2.1	0.78	ppb v/v			06/19/12 23:03	2.61
Benzene	**140**		0.78	0.39	ppb v/v			06/19/12 23:03	2.61
Benzyl chloride	ND		2.1	0.65	ppb v/v			06/19/12 23:03	2.61
Bromodichloromethane	ND		0.78	0.39	ppb v/v			06/19/12 23:03	2.61
Bromoform	ND	*	1.0	0.52	ppb v/v			06/19/12 23:03	2.61
Bromomethane	ND		2.1	0.52	ppb v/v			06/19/12 23:03	2.61
2-Butanone (MEK)	**4.6**		2.1	1.0	ppb v/v			06/19/12 23:03	2.61
Carbon disulfide	**4.6**		2.1	0.52	ppb v/v			06/19/12 23:03	2.61
Carbon tetrachloride	ND		2.1	0.65	ppb v/v			06/19/12 23:03	2.61
Chlorobenzene	ND		0.78	0.26	ppb v/v			06/19/12 23:03	2.61
Dibromochloromethane	ND		1.0	0.26	ppb v/v			06/19/12 23:03	2.61
Chloroethane	ND		2.1	0.52	ppb v/v			06/19/12 23:03	2.61
Chloroform	**0.53**	**J**	0.78	0.26	ppb v/v			06/19/12 23:03	2.61
Chloromethane	**0.64**	**J**	2.1	0.52	ppb v/v			06/19/12 23:03	2.61
1,2-Dibromoethane (EDB)	ND		2.1	0.52	ppb v/v			06/19/12 23:03	2.61
1,2-Dichlorobenzene	ND		1.0	0.39	ppb v/v			06/19/12 23:03	2.61
1,3-Dichlorobenzene	ND		1.0	0.39	ppb v/v			06/19/12 23:03	2.61
1,4-Dichlorobenzene	ND		1.0	0.39	ppb v/v			06/19/12 23:03	2.61
Dichlorodifluoromethane	**0.69**	**J**	1.0	0.39	ppb v/v			06/19/12 23:03	2.61
1,1-Dichloroethane	ND		0.78	0.39	ppb v/v			06/19/12 23:03	2.61
1,2-Dichloroethane	ND		2.1	0.78	ppb v/v			06/19/12 23:03	2.61
1,1-Dichloroethene	ND		2.1	0.52	ppb v/v			06/19/12 23:03	2.61
cis-1,2-Dichloroethene	ND		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
trans-1,2-Dichloroethene	ND		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
1,2-Dichloropropane	ND		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
cis-1,3-Dichloropropene	ND		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
trans-1,3-Dichloropropene	ND		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
Ethylbenzene	**6.9**		1.0	0.39	ppb v/v			06/19/12 23:03	2.61
4-Ethyltoluene	**8.7**		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
Hexachlorobutadiene	ND		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
2-Hexanone	ND		1.0	0.65	ppb v/v			06/19/12 23:03	2.61
Methylene chloride	**0.63**	**J**	1.0	0.52	ppb v/v			06/19/12 23:03	2.61
4-Methyl-2-pentanone (MIBK)	**6.9**		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
Styrene	ND		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
1,1,2,2-Tetrachloroethane	ND		1.0	0.26	ppb v/v			06/19/12 23:03	2.61

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-100-20120607
Date Collected: 06/07/12 09:11
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-12
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
Toluene	**27**		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
1,2,4-Trichlorobenzene	ND		6.5	2.6	ppb v/v			06/19/12 23:03	2.61
1,1,1-Trichloroethane	ND		0.78	0.39	ppb v/v			06/19/12 23:03	2.61
1,1,2-Trichloroethane	ND		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
Trichloroethene	ND		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
Trichlorofluoromethane	**10**		1.0	0.39	ppb v/v			06/19/12 23:03	2.61
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
1,2,4-Trimethylbenzene	**12**		6.5	0.65	ppb v/v			06/19/12 23:03	2.61
1,3,5-Trimethylbenzene	**3.9**		1.0	0.65	ppb v/v			06/19/12 23:03	2.61
Vinyl acetate	ND		2.1	0.52	ppb v/v			06/19/12 23:03	2.61
Vinyl chloride	ND		0.52	0.26	ppb v/v			06/19/12 23:03	2.61
m,p-Xylene	**28**		2.1	0.52	ppb v/v			06/19/12 23:03	2.61
o-Xylene	**9.3**		1.0	0.52	ppb v/v			06/19/12 23:03	2.61
Naphthalene	ND		5.2	2.1	ppb v/v			06/19/12 23:03	2.61

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**60**		5.0	1.9	ug/m3			06/19/12 23:03	2.61
Benzene	**460**		2.5	1.3	ug/m3			06/19/12 23:03	2.61
Benzyl chloride	ND		11	3.4	ug/m3			06/19/12 23:03	2.61
Bromodichloromethane	ND		5.2	2.6	ug/m3			06/19/12 23:03	2.61
Bromoform	ND	*	11	5.4	ug/m3			06/19/12 23:03	2.61
Bromomethane	ND		8.1	2.0	ug/m3			06/19/12 23:03	2.61
2-Butanone (MEK)	**14**		6.2	3.1	ug/m3			06/19/12 23:03	2.61
Carbon disulfide	**14**		6.5	1.6	ug/m3			06/19/12 23:03	2.61
Carbon tetrachloride	ND		13	4.1	ug/m3			06/19/12 23:03	2.61
Chlorobenzene	ND		3.6	1.2	ug/m3			06/19/12 23:03	2.61
Dibromochloromethane	ND		8.9	2.2	ug/m3			06/19/12 23:03	2.61
Chloroethane	ND		5.5	1.4	ug/m3			06/19/12 23:03	2.61
Chloroform	**2.6**	**J**	3.8	1.3	ug/m3			06/19/12 23:03	2.61
Chloromethane	**1.3**	**J**	4.3	1.1	ug/m3			06/19/12 23:03	2.61
1,2-Dibromoethane (EDB)	ND		16	4.0	ug/m3			06/19/12 23:03	2.61
1,2-Dichlorobenzene	ND		6.3	2.4	ug/m3			06/19/12 23:03	2.61
1,3-Dichlorobenzene	ND		6.3	2.4	ug/m3			06/19/12 23:03	2.61
1,4-Dichlorobenzene	ND		6.3	2.4	ug/m3			06/19/12 23:03	2.61
Dichlorodifluoromethane	**3.4**	**J**	5.2	1.9	ug/m3			06/19/12 23:03	2.61
1,1-Dichloroethane	ND		3.2	1.6	ug/m3			06/19/12 23:03	2.61
1,2-Dichloroethane	ND		8.5	3.2	ug/m3			06/19/12 23:03	2.61
1,1-Dichloroethene	ND		8.3	2.1	ug/m3			06/19/12 23:03	2.61
cis-1,2-Dichloroethene	ND		4.1	2.1	ug/m3			06/19/12 23:03	2.61
trans-1,2-Dichloroethene	ND		4.1	2.1	ug/m3			06/19/12 23:03	2.61
1,2-Dichloropropane	ND		4.8	2.4	ug/m3			06/19/12 23:03	2.61
cis-1,3-Dichloropropene	ND		4.7	2.4	ug/m3			06/19/12 23:03	2.61
trans-1,3-Dichloropropene	ND		4.7	2.4	ug/m3			06/19/12 23:03	2.61
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		7.3	3.6	ug/m3			06/19/12 23:03	2.61
Ethylbenzene	**30**		4.5	1.7	ug/m3			06/19/12 23:03	2.61
4-Ethyltoluene	**43**		5.1	2.6	ug/m3			06/19/12 23:03	2.61
Hexachlorobutadiene	ND		11	5.6	ug/m3			06/19/12 23:03	2.61
2-Hexanone	ND		4.3	2.7	ug/m3			06/19/12 23:03	2.61
Methylene chloride	**2.2**	**J**	3.6	1.8	ug/m3			06/19/12 23:03	2.61
4-Methyl-2-pentanone (MIBK)	**28**		4.3	2.1	ug/m3			06/19/12 23:03	2.61

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-100-20120607
Date Collected: 06/07/12 09:11
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-12
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		4.4	2.2	ug/m3			06/19/12 23:03	2.61
1,1,2,2-Tetrachloroethane	ND		7.2	1.8	ug/m3			06/19/12 23:03	2.61
Tetrachloroethene	ND		7.1	3.5	ug/m3			06/19/12 23:03	2.61
Toluene	**100**		3.9	2.0	ug/m3			06/19/12 23:03	2.61
1,2,4-Trichlorobenzene	ND		48	19	ug/m3			06/19/12 23:03	2.61
1,1,1-Trichloroethane	ND		4.3	2.1	ug/m3			06/19/12 23:03	2.61
1,1,2-Trichloroethane	ND		5.7	2.8	ug/m3			06/19/12 23:03	2.61
Trichloroethene	ND		5.6	2.8	ug/m3			06/19/12 23:03	2.61
Trichlorofluoromethane	**58**		5.9	2.2	ug/m3			06/19/12 23:03	2.61
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	4.0	ug/m3			06/19/12 23:03	2.61
1,2,4-Trimethylbenzene	**61**		32	3.2	ug/m3			06/19/12 23:03	2.61
1,3,5-Trimethylbenzene	**19**		5.1	3.2	ug/m3			06/19/12 23:03	2.61
Vinyl acetate	ND		7.4	1.8	ug/m3			06/19/12 23:03	2.61
Vinyl chloride	ND		1.3	0.67	ug/m3			06/19/12 23:03	2.61
m,p-Xylene	**120**		9.1	2.3	ug/m3			06/19/12 23:03	2.61
o-Xylene	**40**		4.5	2.3	ug/m3			06/19/12 23:03	2.61
Naphthalene	ND		27	11	ug/m3			06/19/12 23:03	2.61

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*		*06/19/12 23:03*	*2.61*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/19/12 23:03*	*2.61*
Toluene-d8 (Surr)	*103*		*70 - 130*		*06/19/12 23:03*	*2.61*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-11-20120607
Date Collected: 06/07/12 09:51
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-13
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**13**		0.021	0.0042	% v/v			06/18/12 15:16	2.1
Helium	ND		0.042	0.021	% v/v			06/18/12 15:16	2.1
Methane (TCD)	**4.6**		0.00042	0.00013	% v/v			06/18/12 15:16	2.1
Nitrogen	**78**		2.1	1.1	% v/v			06/18/12 15:16	2.1
Oxygen	**1.3**		0.42	0.063	% v/v			06/18/12 15:16	2.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**130000**		210	42	ppm v/v			06/18/12 15:16	2.1
Helium	ND		420	210	ppm v/v			06/18/12 15:16	2.1
Methane (TCD)	**46000**		4.2	1.3	ppm v/v			06/18/12 15:16	2.1
Nitrogen	**780000**		21000	11000	ppm v/v			06/18/12 15:16	2.1
Oxygen	**13000**		4200	630	ppm v/v			06/18/12 15:16	2.1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**9.0**		1.8	0.66	ppb v/v			06/20/12 16:00	2.21
Benzene	**42**		0.66	0.33	ppb v/v			06/20/12 16:00	2.21
Benzyl chloride	ND		1.8	0.55	ppb v/v			06/20/12 16:00	2.21
Bromodichloromethane	ND		0.66	0.33	ppb v/v			06/20/12 16:00	2.21
Bromoform	ND	*	0.88	0.44	ppb v/v			06/20/12 16:00	2.21
Bromomethane	ND		1.8	0.44	ppb v/v			06/20/12 16:00	2.21
2-Butanone (MEK)	**1.7**	**J**	1.8	0.88	ppb v/v			06/20/12 16:00	2.21
Carbon disulfide	**3.2**		1.8	0.44	ppb v/v			06/20/12 16:00	2.21
Carbon tetrachloride	ND		1.8	0.55	ppb v/v			06/20/12 16:00	2.21
Chlorobenzene	ND		0.66	0.22	ppb v/v			06/20/12 16:00	2.21
Dibromochloromethane	ND		0.88	0.22	ppb v/v			06/20/12 16:00	2.21
Chloroethane	**2.6**		1.8	0.44	ppb v/v			06/20/12 16:00	2.21
Chloroform	**0.43**	**J**	0.66	0.22	ppb v/v			06/20/12 16:00	2.21
Chloromethane	ND		1.8	0.44	ppb v/v			06/20/12 16:00	2.21
1,2-Dibromoethane (EDB)	ND		1.8	0.44	ppb v/v			06/20/12 16:00	2.21
1,2-Dichlorobenzene	ND		0.88	0.33	ppb v/v			06/20/12 16:00	2.21
1,3-Dichlorobenzene	ND		0.88	0.33	ppb v/v			06/20/12 16:00	2.21
1,4-Dichlorobenzene	ND		0.88	0.33	ppb v/v			06/20/12 16:00	2.21
Dichlorodifluoromethane	**0.69**	**J**	0.88	0.33	ppb v/v			06/20/12 16:00	2.21
1,1-Dichloroethane	ND		0.66	0.33	ppb v/v			06/20/12 16:00	2.21
1,2-Dichloroethane	ND		1.8	0.66	ppb v/v			06/20/12 16:00	2.21
1,1-Dichloroethene	ND		1.8	0.44	ppb v/v			06/20/12 16:00	2.21
cis-1,2-Dichloroethene	ND		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
trans-1,2-Dichloroethene	ND		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
1,2-Dichloropropane	ND		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
cis-1,3-Dichloropropene	ND		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
trans-1,3-Dichloropropene	ND		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
Ethylbenzene	**2.4**		0.88	0.33	ppb v/v			06/20/12 16:00	2.21
4-Ethyltoluene	**2.9**		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
Hexachlorobutadiene	ND		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
2-Hexanone	ND		0.88	0.55	ppb v/v			06/20/12 16:00	2.21
Methylene chloride	**0.64**	**J**	0.88	0.44	ppb v/v			06/20/12 16:00	2.21
4-Methyl-2-pentanone (MIBK)	**2.4**		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
Styrene	ND		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
1,1,2,2-Tetrachloroethane	ND		0.88	0.22	ppb v/v			06/20/12 16:00	2.21

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-11-20120607
Date Collected: 06/07/12 09:51
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-13
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
Toluene	**8.0**		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
1,2,4-Trichlorobenzene	ND		5.5	2.2	ppb v/v			06/20/12 16:00	2.21
1,1,1-Trichloroethane	ND		0.66	0.33	ppb v/v			06/20/12 16:00	2.21
1,1,2-Trichloroethane	ND		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
Trichloroethene	ND		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
Trichlorofluoromethane	**33**		0.88	0.33	ppb v/v			06/20/12 16:00	2.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
1,2,4-Trimethylbenzene	**4.0**	**J**	5.5	0.55	ppb v/v			06/20/12 16:00	2.21
1,3,5-Trimethylbenzene	**1.3**		0.88	0.55	ppb v/v			06/20/12 16:00	2.21
Vinyl acetate	ND		1.8	0.44	ppb v/v			06/20/12 16:00	2.21
Vinyl chloride	**2.1**		0.44	0.22	ppb v/v			06/20/12 16:00	2.21
m,p-Xylene	**9.8**		1.8	0.44	ppb v/v			06/20/12 16:00	2.21
o-Xylene	**3.5**		0.88	0.44	ppb v/v			06/20/12 16:00	2.21
Naphthalene	ND		4.4	1.8	ppb v/v			06/20/12 16:00	2.21

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**21**		4.2	1.6	ug/m3			06/20/12 16:00	2.21
Benzene	**130**		2.1	1.1	ug/m3			06/20/12 16:00	2.21
Benzyl chloride	ND		9.2	2.9	ug/m3			06/20/12 16:00	2.21
Bromodichloromethane	ND		4.4	2.2	ug/m3			06/20/12 16:00	2.21
Bromoform	ND	*	9.1	4.6	ug/m3			06/20/12 16:00	2.21
Bromomethane	ND		6.9	1.7	ug/m3			06/20/12 16:00	2.21
2-Butanone (MEK)	**5.0**	**J**	5.2	2.6	ug/m3			06/20/12 16:00	2.21
Carbon disulfide	**10**		5.5	1.4	ug/m3			06/20/12 16:00	2.21
Carbon tetrachloride	ND		11	3.5	ug/m3			06/20/12 16:00	2.21
Chlorobenzene	ND		3.0	1.0	ug/m3			06/20/12 16:00	2.21
Dibromochloromethane	ND		7.5	1.9	ug/m3			06/20/12 16:00	2.21
Chloroethane	**6.8**		4.7	1.2	ug/m3			06/20/12 16:00	2.21
Chloroform	**2.1**	**J**	3.2	1.1	ug/m3			06/20/12 16:00	2.21
Chloromethane	ND		3.7	0.91	ug/m3			06/20/12 16:00	2.21
1,2-Dibromoethane (EDB)	ND		14	3.4	ug/m3			06/20/12 16:00	2.21
1,2-Dichlorobenzene	ND		5.3	2.0	ug/m3			06/20/12 16:00	2.21
1,3-Dichlorobenzene	ND		5.3	2.0	ug/m3			06/20/12 16:00	2.21
1,4-Dichlorobenzene	ND		5.3	2.0	ug/m3			06/20/12 16:00	2.21
Dichlorodifluoromethane	**3.4**	**J**	4.4	1.6	ug/m3			06/20/12 16:00	2.21
1,1-Dichloroethane	ND		2.7	1.3	ug/m3			06/20/12 16:00	2.21
1,2-Dichloroethane	ND		7.2	2.7	ug/m3			06/20/12 16:00	2.21
1,1-Dichloroethene	ND		7.0	1.8	ug/m3			06/20/12 16:00	2.21
cis-1,2-Dichloroethene	ND		3.5	1.8	ug/m3			06/20/12 16:00	2.21
trans-1,2-Dichloroethene	ND		3.5	1.8	ug/m3			06/20/12 16:00	2.21
1,2-Dichloropropane	ND		4.1	2.0	ug/m3			06/20/12 16:00	2.21
cis-1,3-Dichloropropene	ND		4.0	2.0	ug/m3			06/20/12 16:00	2.21
trans-1,3-Dichloropropene	ND		4.0	2.0	ug/m3			06/20/12 16:00	2.21
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		6.2	3.1	ug/m3			06/20/12 16:00	2.21
Ethylbenzene	**10**		3.8	1.4	ug/m3			06/20/12 16:00	2.21
4-Ethyltoluene	**14**		4.3	2.2	ug/m3			06/20/12 16:00	2.21
Hexachlorobutadiene	ND		9.4	4.7	ug/m3			06/20/12 16:00	2.21
2-Hexanone	ND		3.6	2.3	ug/m3			06/20/12 16:00	2.21
Methylene chloride	**2.2**	**J**	3.1	1.5	ug/m3			06/20/12 16:00	2.21
4-Methyl-2-pentanone (MIBK)	**9.9**		3.6	1.8	ug/m3			06/20/12 16:00	2.21

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-11-20120607
Date Collected: 06/07/12 09:51
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-13
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		3.8	1.9	ug/m3			06/20/12 16:00	2.21
1,1,2,2-Tetrachloroethane	ND		6.1	1.5	ug/m3			06/20/12 16:00	2.21
Tetrachloroethene	ND		6.0	3.0	ug/m3			06/20/12 16:00	2.21
Toluene	**30**		3.3	1.7	ug/m3			06/20/12 16:00	2.21
1,2,4-Trichlorobenzene	ND		41	16	ug/m3			06/20/12 16:00	2.21
1,1,1-Trichloroethane	ND		3.6	1.8	ug/m3			06/20/12 16:00	2.21
1,1,2-Trichloroethane	ND		4.8	2.4	ug/m3			06/20/12 16:00	2.21
Trichloroethene	ND		4.8	2.4	ug/m3			06/20/12 16:00	2.21
Trichlorofluoromethane	**180**		5.0	1.9	ug/m3			06/20/12 16:00	2.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.8	3.4	ug/m3			06/20/12 16:00	2.21
1,2,4-Trimethylbenzene	**20**	**J**	27	2.7	ug/m3			06/20/12 16:00	2.21
1,3,5-Trimethylbenzene	**6.5**		4.3	2.7	ug/m3			06/20/12 16:00	2.21
Vinyl acetate	ND		6.2	1.6	ug/m3			06/20/12 16:00	2.21
Vinyl chloride	**5.5**		1.1	0.56	ug/m3			06/20/12 16:00	2.21
m,p-Xylene	**43**		7.7	1.9	ug/m3			06/20/12 16:00	2.21
o-Xylene	**15**		3.8	1.9	ug/m3			06/20/12 16:00	2.21
Naphthalene	ND		23	9.3	ug/m3			06/20/12 16:00	2.21

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*06/20/12 16:00*	*2.21*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/20/12 16:00*	*2.21*
Toluene-d8 (Surr)	*106*		*70 - 130*		*06/20/12 16:00*	*2.21*

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-12-20120607
Date Collected: 06/07/12 10:25
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-14
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**24**		0.018	0.0036	% v/v			06/18/12 15:33	1.79
Helium	ND		0.036	0.018	% v/v			06/18/12 15:33	1.79
Methane (FID)	**0.17**		0.00036	0.00011	% v/v			06/18/12 15:33	1.79
Nitrogen	**72**		1.8	0.90	% v/v			06/18/12 15:33	1.79
Oxygen	**1.4**		0.36	0.054	% v/v			06/18/12 15:33	1.79

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**240000**		180	36	ppm v/v			06/18/12 15:33	1.79
Helium	ND		360	180	ppm v/v			06/18/12 15:33	1.79
Methane (FID)	**1700**		3.6	1.1	ppm v/v			06/18/12 15:33	1.79
Nitrogen	**720000**		18000	9000	ppm v/v			06/18/12 15:33	1.79
Oxygen	**14000**		3600	540	ppm v/v			06/18/12 15:33	1.79

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**8.5**		4.5	1.7	ppb v/v			06/20/12 00:44	5.58
Benzene	**200**		1.7	0.84	ppb v/v			06/20/12 00:44	5.58
Benzyl chloride	ND		4.5	1.4	ppb v/v			06/20/12 00:44	5.58
Bromodichloromethane	ND		1.7	0.84	ppb v/v			06/20/12 00:44	5.58
Bromoform	ND	*	2.2	1.1	ppb v/v			06/20/12 00:44	5.58
Bromomethane	ND		4.5	1.1	ppb v/v			06/20/12 00:44	5.58
2-Butanone (MEK)	ND		4.5	2.2	ppb v/v			06/20/12 00:44	5.58
Carbon disulfide	**6.7**		4.5	1.1	ppb v/v			06/20/12 00:44	5.58
Carbon tetrachloride	ND		4.5	1.4	ppb v/v			06/20/12 00:44	5.58
Chlorobenzene	ND		1.7	0.56	ppb v/v			06/20/12 00:44	5.58
Dibromochloromethane	ND		2.2	0.56	ppb v/v			06/20/12 00:44	5.58
Chloroethane	ND		4.5	1.1	ppb v/v			06/20/12 00:44	5.58
Chloroform	ND		1.7	0.56	ppb v/v			06/20/12 00:44	5.58
Chloromethane	ND		4.5	1.1	ppb v/v			06/20/12 00:44	5.58
1,2-Dibromoethane (EDB)	ND		4.5	1.1	ppb v/v			06/20/12 00:44	5.58
1,2-Dichlorobenzene	ND		2.2	0.84	ppb v/v			06/20/12 00:44	5.58
1,3-Dichlorobenzene	ND		2.2	0.84	ppb v/v			06/20/12 00:44	5.58
1,4-Dichlorobenzene	ND		2.2	0.84	ppb v/v			06/20/12 00:44	5.58
Dichlorodifluoromethane	ND		2.2	0.84	ppb v/v			06/20/12 00:44	5.58
1,1-Dichloroethane	ND		1.7	0.84	ppb v/v			06/20/12 00:44	5.58
1,2-Dichloroethane	ND		4.5	1.7	ppb v/v			06/20/12 00:44	5.58
1,1-Dichloroethene	ND		4.5	1.1	ppb v/v			06/20/12 00:44	5.58
cis-1,2-Dichloroethene	ND		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
trans-1,2-Dichloroethene	ND		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
1,2-Dichloropropane	ND		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
cis-1,3-Dichloropropene	ND		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
trans-1,3-Dichloropropene	ND		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
Ethylbenzene	**7.1**		2.2	0.84	ppb v/v			06/20/12 00:44	5.58
4-Ethyltoluene	**8.4**		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
Hexachlorobutadiene	ND		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
2-Hexanone	ND		2.2	1.4	ppb v/v			06/20/12 00:44	5.58
Methylene chloride	**2.2**		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
4-Methyl-2-pentanone (MIBK)	**8.9**		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
Styrene	ND		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
1,1,2,2-Tetrachloroethane	ND		2.2	0.56	ppb v/v			06/20/12 00:44	5.58

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-12-20120607
Date Collected: 06/07/12 10:25
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-14
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
Toluene	**27**		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
1,2,4-Trichlorobenzene	ND		14	5.6	ppb v/v			06/20/12 00:44	5.58
1,1,1-Trichloroethane	ND		1.7	0.84	ppb v/v			06/20/12 00:44	5.58
1,1,2-Trichloroethane	ND		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
Trichloroethene	ND		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
Trichlorofluoromethane	**2.0**	**J**	2.2	0.84	ppb v/v			06/20/12 00:44	5.58
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
1,2,4-Trimethylbenzene	**11**	**J**	14	1.4	ppb v/v			06/20/12 00:44	5.58
1,3,5-Trimethylbenzene	**3.8**		2.2	1.4	ppb v/v			06/20/12 00:44	5.58
Vinyl acetate	ND		4.5	1.1	ppb v/v			06/20/12 00:44	5.58
Vinyl chloride	ND		1.1	0.56	ppb v/v			06/20/12 00:44	5.58
m,p-Xylene	**26**		4.5	1.1	ppb v/v			06/20/12 00:44	5.58
o-Xylene	**8.7**		2.2	1.1	ppb v/v			06/20/12 00:44	5.58
Naphthalene	ND		11	4.5	ppb v/v			06/20/12 00:44	5.58

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**20**		11	4.0	ug/m3			06/20/12 00:44	5.58
Benzene	**620**		5.3	2.7	ug/m3			06/20/12 00:44	5.58
Benzyl chloride	ND		23	7.2	ug/m3			06/20/12 00:44	5.58
Bromodichloromethane	ND		11	5.6	ug/m3			06/20/12 00:44	5.58
Bromoform	ND	*	23	12	ug/m3			06/20/12 00:44	5.58
Bromomethane	ND		17	4.3	ug/m3			06/20/12 00:44	5.58
2-Butanone (MEK)	ND		13	6.6	ug/m3			06/20/12 00:44	5.58
Carbon disulfide	**21**		14	3.5	ug/m3			06/20/12 00:44	5.58
Carbon tetrachloride	ND		28	8.8	ug/m3			06/20/12 00:44	5.58
Chlorobenzene	ND		7.7	2.6	ug/m3			06/20/12 00:44	5.58
Dibromochloromethane	ND		19	4.8	ug/m3			06/20/12 00:44	5.58
Chloroethane	ND		12	2.9	ug/m3			06/20/12 00:44	5.58
Chloroform	ND		8.2	2.7	ug/m3			06/20/12 00:44	5.58
Chloromethane	ND		9.2	2.3	ug/m3			06/20/12 00:44	5.58
1,2-Dibromoethane (EDB)	ND		34	8.6	ug/m3			06/20/12 00:44	5.58
1,2-Dichlorobenzene	ND		13	5.0	ug/m3			06/20/12 00:44	5.58
1,3-Dichlorobenzene	ND		13	5.0	ug/m3			06/20/12 00:44	5.58
1,4-Dichlorobenzene	ND		13	5.0	ug/m3			06/20/12 00:44	5.58
Dichlorodifluoromethane	ND		11	4.1	ug/m3			06/20/12 00:44	5.58
1,1-Dichloroethane	ND		6.8	3.4	ug/m3			06/20/12 00:44	5.58
1,2-Dichloroethane	ND		18	6.8	ug/m3			06/20/12 00:44	5.58
1,1-Dichloroethene	ND		18	4.4	ug/m3			06/20/12 00:44	5.58
cis-1,2-Dichloroethene	ND		8.8	4.4	ug/m3			06/20/12 00:44	5.58
trans-1,2-Dichloroethene	ND		8.8	4.4	ug/m3			06/20/12 00:44	5.58
1,2-Dichloropropane	ND		10	5.2	ug/m3			06/20/12 00:44	5.58
cis-1,3-Dichloropropene	ND		10	5.1	ug/m3			06/20/12 00:44	5.58
trans-1,3-Dichloropropene	ND		10	5.1	ug/m3			06/20/12 00:44	5.58
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		16	7.8	ug/m3			06/20/12 00:44	5.58
Ethylbenzene	**31**		9.7	3.6	ug/m3			06/20/12 00:44	5.58
4-Ethyltoluene	**42**		11	5.5	ug/m3			06/20/12 00:44	5.58
Hexachlorobutadiene	ND		24	12	ug/m3			06/20/12 00:44	5.58
2-Hexanone	ND		9.1	5.7	ug/m3			06/20/12 00:44	5.58
Methylene chloride	**7.6**		7.8	3.9	ug/m3			06/20/12 00:44	5.58
4-Methyl-2-pentanone (MIBK)	**36**		9.1	4.6	ug/m3			06/20/12 00:44	5.58

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-12-20120607
Date Collected: 06/07/12 10:25
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 1L

Lab Sample ID: 340-2373-14
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		9.5	4.8	ug/m3			06/20/12 00:44	5.58
1,1,2,2-Tetrachloroethane	ND		15	3.8	ug/m3			06/20/12 00:44	5.58
Tetrachloroethene	ND		15	7.6	ug/m3			06/20/12 00:44	5.58
Toluene	**100**		8.4	4.2	ug/m3			06/20/12 00:44	5.58
1,2,4-Trichlorobenzene	ND		100	41	ug/m3			06/20/12 00:44	5.58
1,1,1-Trichloroethane	ND		9.1	4.6	ug/m3			06/20/12 00:44	5.58
1,1,2-Trichloroethane	ND		12	6.1	ug/m3			06/20/12 00:44	5.58
Trichloroethene	ND		12	6.0	ug/m3			06/20/12 00:44	5.58
Trichlorofluoromethane	**11**	**J**	13	4.7	ug/m3			06/20/12 00:44	5.58
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		17	8.6	ug/m3			06/20/12 00:44	5.58
1,2,4-Trimethylbenzene	**55**	**J**	69	6.9	ug/m3			06/20/12 00:44	5.58
1,3,5-Trimethylbenzene	**18**		11	6.9	ug/m3			06/20/12 00:44	5.58
Vinyl acetate	ND		16	3.9	ug/m3			06/20/12 00:44	5.58
Vinyl chloride	ND		2.9	1.4	ug/m3			06/20/12 00:44	5.58
m,p-Xylene	**110**		19	4.8	ug/m3			06/20/12 00:44	5.58
o-Xylene	**38**		9.7	4.8	ug/m3			06/20/12 00:44	5.58
Naphthalene	ND		59	23	ug/m3			06/20/12 00:44	5.58

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*06/20/12 00:44*	*5.58*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/20/12 00:44*	*5.58*
Toluene-d8 (Surr)	*104*		*70 - 130*		*06/20/12 00:44*	*5.58*

Surrogate Summary

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
340-2373-1	SGMP-02-20120606	107	110	99
340-2373-1	SGMP-02-20120606	101	108	104
340-2373-2	SGMP-03-20120606	131 X	116	104
340-2373-3	SGMP-04-20120606	128	107	97
340-2373-3	SGMP-04-20120606	101	105	101
340-2373-4	SGMP-05-20120606	118	105	100
340-2373-4	SGMP-05-20120606	108	107	102
340-2373-5	SGMP-06-20120606	98	117	106
340-2373-6	SGMP-07-20120606	100	116	106
340-2373-7	SGMP-08-20120606	102	107	103
340-2373-8	SGMP-09-20120607	119	104	101
340-2373-8	SGMP-09-20120607	104	105	104
340-2373-9	SGMP-01-20120607	102	106	100
340-2373-10	TB-20120607	100	105	102
340-2373-11	SGMP-10-20120607	113	106	103
340-2373-12	SGMP-100-20120607	113	105	103
340-2373-13	SGMP-11-20120607	112	105	106
340-2373-14	SGMP-12-20120607	108	105	104
LCS 340-1854/1000	Lab Control Sample	98	103	100
LCS 340-1863/3	Lab Control Sample	99	105	101
LCS 340-1873/3	Lab Control Sample	99	104	103
LCSD 340-1854/15	Lab Control Sample Dup	98	104	101
LCSD 340-1863/4	Lab Control Sample Dup	99	105	101
LCSD 340-1873/4	Lab Control Sample Dup	99	107	103
MB 340-1854/16	Method Blank	98	105	101
MB 340-1863/5	Method Blank	98	106	100
MB 340-1873/5	Method Blank	99	105	101

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: D1946 - Fixed Gases in Air (GC)

Lab Sample ID: MB 340-1805/11
Matrix: Air
Analysis Batch: 1805

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		0.020	0.010	% v/v			06/12/12 12:46	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		200	100	ppm v/v			06/12/12 12:46	1

Lab Sample ID: MB 340-1805/8
Matrix: Air
Analysis Batch: 1805

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	ND		0.010	0.0020	% v/v			06/12/12 09:38	1
Methane (FID)	ND		0.00020	0.000060	% v/v			06/12/12 09:38	1
Nitrogen	ND		1.0	0.50	% v/v			06/12/12 09:38	1
Oxygen	ND		0.20	0.030	% v/v			06/12/12 09:38	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	ND		100	20	ppm v/v			06/12/12 09:38	1
Methane (FID)	ND		2.0	0.60	ppm v/v			06/12/12 09:38	1
Nitrogen	ND		10000	5000	ppm v/v			06/12/12 09:38	1
Oxygen	ND		2000	300	ppm v/v			06/12/12 09:38	1

Lab Sample ID: LCS 340-1805/4
Matrix: Air
Analysis Batch: 1805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (TCD)	20.0	21.0		% v/v		105	80 - 120
Methane (TCD)	19.8	20.6		% v/v		104	80 - 120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (TCD)	200000	210000		ppm v/v		105	80 - 120
Methane (TCD)	200000	206000		ppm v/v		104	80 - 120

Lab Sample ID: LCS 340-1805/6
Matrix: Air
Analysis Batch: 1805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (FID)	0.400	0.420		% v/v		105	80 - 120
Methane (FID)	0.0495	0.0528		% v/v		107	80 - 120
Nitrogen	20.0	20.9		% v/v		105	80 - 120
Oxygen	4.98	5.21		% v/v		105	80 - 120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (FID)	4000	4200		ppm v/v		105	80 - 120
Methane (FID)	500	528		ppm v/v		107	80 - 120
Nitrogen	200000	209000		ppm v/v		105	80 - 120
Oxygen	50000	52100		ppm v/v		105	80 - 120

Method: D1946 - Fixed Gases in Air (GC) (Continued)

Lab Sample ID: LCS 340-1805/9
Matrix: Air
Analysis Batch: 1805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Helium	6.25	6.24		% v/v		100	80 - 120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Helium	62000	62400		ppm v/v		100	80 - 120

Lab Sample ID: LCSD 340-1805/10
Matrix: Air
Analysis Batch: 1805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Helium	6.25	6.22		% v/v		100	80 - 120	0	20

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Helium	62000	62200		ppm v/v		100	80 - 120	0	20

Lab Sample ID: LCSD 340-1805/5
Matrix: Air
Analysis Batch: 1805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon Dioxide (TCD)	20.0	21.0		% v/v		105	80 - 120	0	20
Methane (TCD)	19.8	20.6		% v/v		104	80 - 120	0	20

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon Dioxide (TCD)	200000	210000		ppm v/v		105	80 - 120	0	20
Methane (TCD)	200000	206000		ppm v/v		104	80 - 120	0	20

Lab Sample ID: LCSD 340-1805/7
Matrix: Air
Analysis Batch: 1805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon Dioxide (FID)	0.400	0.421		% v/v		105	80 - 120	0	20
Methane (FID)	0.0495	0.0528		% v/v		107	80 - 120	0	20
Nitrogen	20.0	21.0		% v/v		105	80 - 120	0	20
Oxygen	4.98	5.23		% v/v		105	80 - 120	0	20

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon Dioxide (FID)	4000	4210		ppm v/v		105	80 - 120	0	20
Methane (FID)	500	528		ppm v/v		107	80 - 120	0	20
Nitrogen	200000	210000		ppm v/v		105	80 - 120	0	20
Oxygen	50000	52300		ppm v/v		105	80 - 120	0	20

Lab Sample ID: MB 340-1861/11
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		0.020	0.010	% v/v			06/18/12 14:10	1

Method: D1946 - Fixed Gases in Air (GC) (Continued)

Lab Sample ID: MB 340-1861/11
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		200	100	ppm v/v			06/18/12 14:10	1

Lab Sample ID: MB 340-1861/8
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	ND		0.010	0.0020	% v/v			06/18/12 12:55	1
Methane (FID)	ND		0.00020	0.000060	% v/v			06/18/12 12:55	1
Nitrogen	ND		1.0	0.50	% v/v			06/18/12 12:55	1
Oxygen	ND		0.20	0.030	% v/v			06/18/12 12:55	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	ND		100	20	ppm v/v			06/18/12 12:55	1
Methane (FID)	ND		2.0	0.60	ppm v/v			06/18/12 12:55	1
Nitrogen	ND		10000	5000	ppm v/v			06/18/12 12:55	1
Oxygen	ND		2000	300	ppm v/v			06/18/12 12:55	1

Lab Sample ID: LCS 340-1861/4
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (TCD)	20.0	21.0		% v/v		105	80 - 120
Methane (TCD)	19.8	20.5		% v/v		104	80 - 120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (TCD)	200000	210000		ppm v/v		105	80 - 120
Methane (TCD)	200000	205000		ppm v/v		104	80 - 120

Lab Sample ID: LCS 340-1861/6
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (FID)	0.400	0.418		% v/v		105	80 - 120
Methane (FID)	0.0495	0.0526		% v/v		106	80 - 120
Nitrogen	20.0	20.9		% v/v		105	80 - 120
Oxygen	4.98	5.23		% v/v		105	80 - 120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (FID)	4000	4180		ppm v/v		105	80 - 120
Methane (FID)	500	526		ppm v/v		106	80 - 120
Nitrogen	200000	209000		ppm v/v		105	80 - 120
Oxygen	50000	52300		ppm v/v		105	80 - 120

Method: D1946 - Fixed Gases in Air (GC) (Continued)

Lab Sample ID: LCS 340-1861/9
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Helium	6.25	6.22		% v/v		99	80 - 120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Helium	62000	62200		ppm v/v		99	80 - 120

Lab Sample ID: LCSD 340-1861/10
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Helium	6.25	6.23		% v/v		100	80 - 120	0	20

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Helium	62000	62300		ppm v/v		100	80 - 120	0	20

Lab Sample ID: LCSD 340-1861/5
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon Dioxide (TCD)	20.0	21.0		% v/v		105	80 - 120	0	20
Methane (TCD)	19.8	20.6		% v/v		104	80 - 120	0	20

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon Dioxide (TCD)	200000	210000		ppm v/v		105	80 - 120	0	20
Methane (TCD)	200000	206000		ppm v/v		104	80 - 120	0	20

Lab Sample ID: LCSD 340-1861/7
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon Dioxide (FID)	0.400	0.419		% v/v		105	80 - 120	0	20
Methane (FID)	0.0495	0.0526		% v/v		106	80 - 120	0	20
Nitrogen	20.0	20.9		% v/v		105	80 - 120	0	20
Oxygen	4.98	5.21		% v/v		105	80 - 120	0	20

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon Dioxide (FID)	4000	4190		ppm v/v		105	80 - 120	0	20
Methane (FID)	500	526		ppm v/v		106	80 - 120	0	20
Nitrogen	200000	209000		ppm v/v		105	80 - 120	0	20
Oxygen	50000	52100		ppm v/v		105	80 - 120	0	20

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 340-1854/16
Matrix: Air
Analysis Batch: 1854

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.80	0.30	ppb v/v			06/18/12 19:18	1
Benzene	ND		0.30	0.15	ppb v/v			06/18/12 19:18	1
Benzyl chloride	ND		0.80	0.25	ppb v/v			06/18/12 19:18	1
Bromodichloromethane	ND		0.30	0.15	ppb v/v			06/18/12 19:18	1
Bromoform	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
Bromomethane	ND		0.80	0.20	ppb v/v			06/18/12 19:18	1
2-Butanone (MEK)	ND		0.80	0.40	ppb v/v			06/18/12 19:18	1
Carbon disulfide	ND		0.80	0.20	ppb v/v			06/18/12 19:18	1
Carbon tetrachloride	ND		0.80	0.25	ppb v/v			06/18/12 19:18	1
Chlorobenzene	ND		0.30	0.10	ppb v/v			06/18/12 19:18	1
Dibromochloromethane	ND		0.40	0.10	ppb v/v			06/18/12 19:18	1
Chloroethane	ND		0.80	0.20	ppb v/v			06/18/12 19:18	1
Chloroform	ND		0.30	0.10	ppb v/v			06/18/12 19:18	1
Chloromethane	ND		0.80	0.20	ppb v/v			06/18/12 19:18	1
1,2-Dibromoethane (EDB)	ND		0.80	0.20	ppb v/v			06/18/12 19:18	1
1,2-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/18/12 19:18	1
1,3-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/18/12 19:18	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/18/12 19:18	1
Dichlorodifluoromethane	ND		0.40	0.15	ppb v/v			06/18/12 19:18	1
1,1-Dichloroethane	ND		0.30	0.15	ppb v/v			06/18/12 19:18	1
1,2-Dichloroethane	ND		0.80	0.30	ppb v/v			06/18/12 19:18	1
1,1-Dichloroethene	ND		0.80	0.20	ppb v/v			06/18/12 19:18	1
cis-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
trans-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
1,2-Dichloropropane	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
cis-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
trans-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
Ethylbenzene	ND		0.40	0.15	ppb v/v			06/18/12 19:18	1
4-Ethyltoluene	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
Hexachlorobutadiene	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
2-Hexanone	ND		0.40	0.25	ppb v/v			06/18/12 19:18	1
Methylene chloride	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
Styrene	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.10	ppb v/v			06/18/12 19:18	1
Tetrachloroethene	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
Toluene	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
1,2,4-Trichlorobenzene	ND		2.5	1.0	ppb v/v			06/18/12 19:18	1
1,1,1-Trichloroethane	ND		0.30	0.15	ppb v/v			06/18/12 19:18	1
1,1,2-Trichloroethane	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
Trichloroethene	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
Trichlorofluoromethane	ND		0.40	0.15	ppb v/v			06/18/12 19:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1
1,2,4-Trimethylbenzene	ND		2.5	0.25	ppb v/v			06/18/12 19:18	1
1,3,5-Trimethylbenzene	ND		0.40	0.25	ppb v/v			06/18/12 19:18	1
Vinyl acetate	ND		0.80	0.20	ppb v/v			06/18/12 19:18	1
Vinyl chloride	ND		0.20	0.10	ppb v/v			06/18/12 19:18	1
m,p-Xylene	ND		0.80	0.20	ppb v/v			06/18/12 19:18	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-1854/16
Matrix: Air
Analysis Batch: 1854

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.40	0.20	ppb v/v			06/18/12 19:18	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1.9	0.71	ug/m3			06/18/12 19:18	1
Benzene	ND		0.96	0.48	ug/m3			06/18/12 19:18	1
Benzyl chloride	ND		4.1	1.3	ug/m3			06/18/12 19:18	1
Bromodichloromethane	ND		2.0	1.0	ug/m3			06/18/12 19:18	1
Bromoform	ND		4.1	2.1	ug/m3			06/18/12 19:18	1
Bromomethane	ND		3.1	0.78	ug/m3			06/18/12 19:18	1
2-Butanone (MEK)	ND		2.4	1.2	ug/m3			06/18/12 19:18	1
Carbon disulfide	ND		2.5	0.62	ug/m3			06/18/12 19:18	1
Carbon tetrachloride	ND		5.0	1.6	ug/m3			06/18/12 19:18	1
Chlorobenzene	ND		1.4	0.46	ug/m3			06/18/12 19:18	1
Dibromochloromethane	ND		3.4	0.85	ug/m3			06/18/12 19:18	1
Chloroethane	ND		2.1	0.53	ug/m3			06/18/12 19:18	1
Chloroform	ND		1.5	0.49	ug/m3			06/18/12 19:18	1
Chloromethane	ND		1.7	0.41	ug/m3			06/18/12 19:18	1
1,2-Dibromoethane (EDB)	ND		6.1	1.5	ug/m3			06/18/12 19:18	1
1,2-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/18/12 19:18	1
1,3-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/18/12 19:18	1
1,4-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/18/12 19:18	1
Dichlorodifluoromethane	ND		2.0	0.74	ug/m3			06/18/12 19:18	1
1,1-Dichloroethane	ND		1.2	0.61	ug/m3			06/18/12 19:18	1
1,2-Dichloroethane	ND		3.2	1.2	ug/m3			06/18/12 19:18	1
1,1-Dichloroethene	ND		3.2	0.79	ug/m3			06/18/12 19:18	1
cis-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/18/12 19:18	1
trans-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/18/12 19:18	1
1,2-Dichloropropane	ND		1.8	0.92	ug/m3			06/18/12 19:18	1
cis-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/18/12 19:18	1
trans-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/18/12 19:18	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8	1.4	ug/m3			06/18/12 19:18	1
Ethylbenzene	ND		1.7	0.65	ug/m3			06/18/12 19:18	1
4-Ethyltoluene	ND		2.0	0.98	ug/m3			06/18/12 19:18	1
Hexachlorobutadiene	ND		4.3	2.1	ug/m3			06/18/12 19:18	1
2-Hexanone	ND		1.6	1.0	ug/m3			06/18/12 19:18	1
Methylene chloride	ND		1.4	0.69	ug/m3			06/18/12 19:18	1
4-Methyl-2-pentanone (MIBK)	ND		1.6	0.82	ug/m3			06/18/12 19:18	1
Styrene	ND		1.7	0.85	ug/m3			06/18/12 19:18	1
1,1,2,2-Tetrachloroethane	ND		2.7	0.69	ug/m3			06/18/12 19:18	1
Tetrachloroethene	ND		2.7	1.4	ug/m3			06/18/12 19:18	1
Toluene	ND		1.5	0.75	ug/m3			06/18/12 19:18	1
1,2,4-Trichlorobenzene	ND		19	7.4	ug/m3			06/18/12 19:18	1
1,1,1-Trichloroethane	ND		1.6	0.82	ug/m3			06/18/12 19:18	1
1,1,2-Trichloroethane	ND		2.2	1.1	ug/m3			06/18/12 19:18	1
Trichloroethene	ND		2.1	1.1	ug/m3			06/18/12 19:18	1
Trichlorofluoromethane	ND		2.2	0.84	ug/m3			06/18/12 19:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.5	ug/m3			06/18/12 19:18	1
1,2,4-Trimethylbenzene	ND		12	1.2	ug/m3			06/18/12 19:18	1
1,3,5-Trimethylbenzene	ND		2.0	1.2	ug/m3			06/18/12 19:18	1
Vinyl acetate	ND		2.8	0.70	ug/m3			06/18/12 19:18	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-1854/16
Matrix: Air
Analysis Batch: 1854

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.51	0.26	ug/m3			06/18/12 19:18	1
m,p-Xylene	ND		3.5	0.87	ug/m3			06/18/12 19:18	1
o-Xylene	ND		1.7	0.87	ug/m3			06/18/12 19:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*06/18/12 19:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/18/12 19:18*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/18/12 19:18*	*1*

Lab Sample ID: LCS 340-1854/1000
Matrix: Air
Analysis Batch: 1854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10.0	10.6		ppb v/v		106	70 - 130
Benzene	10.0	9.98		ppb v/v		100	70 - 130
Benzyl chloride	10.8	10.9		ppb v/v		101	70 - 130
Bromodichloromethane	10.0	10.9		ppb v/v		109	70 - 130
Bromoform	10.0	12.6		ppb v/v		126	70 - 130
Bromomethane	10.0	10.1		ppb v/v		101	70 - 130
2-Butanone (MEK)	10.6	9.96		ppb v/v		94	70 - 130
Carbon disulfide	10.0	11.7		ppb v/v		117	70 - 130
Carbon tetrachloride	10.0	11.8		ppb v/v		118	70 - 130
Chlorobenzene	10.7	10.1		ppb v/v		95	70 - 130
Dibromochloromethane	11.5	11.8		ppb v/v		103	70 - 130
Chloroethane	10.0	10.4		ppb v/v		104	70 - 130
Chloroform	10.0	10.6		ppb v/v		106	70 - 130
Chloromethane	10.0	10.1		ppb v/v		101	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.3		ppb v/v		103	70 - 130
1,2-Dichlorobenzene	10.7	10.1		ppb v/v		95	70 - 130
1,3-Dichlorobenzene	10.8	10.2		ppb v/v		94	70 - 130
1,4-Dichlorobenzene	10.0	10.1		ppb v/v		101	70 - 130
Dichlorodifluoromethane	10.0	10.5		ppb v/v		105	70 - 130
1,1-Dichloroethane	10.0	10.5		ppb v/v		105	70 - 130
1,2-Dichloroethane	10.0	10.1		ppb v/v		101	70 - 130
1,1-Dichloroethene	10.0	10.4		ppb v/v		104	70 - 130
cis-1,2-Dichloroethene	10.0	10.6		ppb v/v		106	70 - 130
trans-1,2-Dichloroethene	10.0	11.1		ppb v/v		111	70 - 130
1,2-Dichloropropane	10.0	9.94		ppb v/v		99	70 - 130
cis-1,3-Dichloropropene	10.6	11.0		ppb v/v		103	70 - 130
trans-1,3-Dichloropropene	10.0	9.03		ppb v/v		90	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	10.7		ppb v/v		107	70 - 130
Ethylbenzene	10.6	10.0		ppb v/v		94	70 - 130
4-Ethyltoluene	10.0	8.50		ppb v/v		85	70 - 130
Hexachlorobutadiene	10.0	10.2		ppb v/v		102	70 - 130
2-Hexanone	10.0	9.41		ppb v/v		94	70 - 130
Methylene chloride	10.0	9.51		ppb v/v		95	70 - 130
4-Methyl-2-pentanone (MIBK)	11.0	9.52		ppb v/v		87	70 - 130
Styrene	10.7	10.5		ppb v/v		98	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-1854/1000
Matrix: Air
Analysis Batch: 1854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	10.8	10.3		ppb v/v		96	70 - 130
Tetrachloroethene	10.0	10.0		ppb v/v		100	70 - 130
Toluene	10.0	9.98		ppb v/v		100	70 - 130
1,2,4-Trichlorobenzene	10.0	10.6		ppb v/v		106	70 - 130
1,1,1-Trichloroethane	10.0	10.8		ppb v/v		108	70 - 130
1,1,2-Trichloroethane	10.0	10.3		ppb v/v		103	70 - 130
Trichloroethene	10.0	10.4		ppb v/v		104	70 - 130
Trichlorofluoromethane	10.0	10.9		ppb v/v		109	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroetha ne	10.0	10.8		ppb v/v		108	70 - 130
1,2,4-Trimethylbenzene	10.0	9.53		ppb v/v		95	70 - 130
1,3,5-Trimethylbenzene	10.7	9.56		ppb v/v		89	70 - 130
Vinyl acetate	10.8	10.4		ppb v/v		97	70 - 130
Vinyl chloride	10.0	11.4		ppb v/v		114	70 - 130
m,p-Xylene	20.0	19.7		ppb v/v		99	70 - 130
o-Xylene	10.8	9.62		ppb v/v		89	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	24	25.1		ug/m3		106	70 - 130
Benzene	32	31.9		ug/m3		100	70 - 130
Benzyl chloride	56	56.2		ug/m3		101	70 - 130
Bromodichloromethane	67	73.3		ug/m3		109	70 - 130
Bromoform	100	130		ug/m3		126	70 - 130
Bromomethane	39	39.1		ug/m3		101	70 - 130
2-Butanone (MEK)	31	29.4		ug/m3		94	70 - 130
Carbon disulfide	31	36.6		ug/m3		117	70 - 130
Carbon tetrachloride	63	74.5		ug/m3		118	70 - 130
Chlorobenzene	49	46.6		ug/m3		95	70 - 130
Dibromochloromethane	98	101		ug/m3		103	70 - 130
Chloroethane	26	27.4		ug/m3		104	70 - 130
Chloroform	49	51.9		ug/m3		106	70 - 130
Chloromethane	21	20.8		ug/m3		101	70 - 130
1,2-Dibromoethane (EDB)	77	79.0		ug/m3		103	70 - 130
1,2-Dichlorobenzene	64	61.0		ug/m3		95	70 - 130
1,3-Dichlorobenzene	65	61.3		ug/m3		94	70 - 130
1,4-Dichlorobenzene	60	60.7		ug/m3		101	70 - 130
Dichlorodifluoromethane	49	52.1		ug/m3		105	70 - 130
1,1-Dichloroethane	40	42.7		ug/m3		105	70 - 130
1,2-Dichloroethane	40	40.7		ug/m3		101	70 - 130
1,1-Dichloroethene	40	41.3		ug/m3		104	70 - 130
cis-1,2-Dichloroethene	40	42.1		ug/m3		106	70 - 130
trans-1,2-Dichloroethene	40	43.8		ug/m3		111	70 - 130
1,2-Dichloropropane	46	45.9		ug/m3		99	70 - 130
cis-1,3-Dichloropropene	48	49.8		ug/m3		103	70 - 130
trans-1,3-Dichloropropene	45	41.0		ug/m3		90	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroet hane	70	75.0		ug/m3		107	70 - 130
Ethylbenzene	46	43.4		ug/m3		94	70 - 130
4-Ethyltoluene	49	41.8		ug/m3		85	70 - 130
Hexachlorobutadiene	110	109		ug/m3		102	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-1854/1000
Matrix: Air
Analysis Batch: 1854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	41	38.6		ug/m3		94	70 - 130
Methylene chloride	35	33.0		ug/m3		95	70 - 130
4-Methyl-2-pentanone (MIBK)	45	39.0		ug/m3		87	70 - 130
Styrene	46	44.6		ug/m3		98	70 - 130
1,1,2,2-Tetrachloroethane	74	70.9		ug/m3		96	70 - 130
Tetrachloroethene	68	68.2		ug/m3		100	70 - 130
Toluene	38	37.6		ug/m3		100	70 - 130
1,2,4-Trichlorobenzene	74	78.5		ug/m3		106	70 - 130
1,1,1-Trichloroethane	55	59.2		ug/m3		108	70 - 130
1,1,2-Trichloroethane	55	56.1		ug/m3		103	70 - 130
Trichloroethene	54	55.9		ug/m3		104	70 - 130
Trichlorofluoromethane	56	61.5		ug/m3		109	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	77	83.0		ug/m3		108	70 - 130
1,2,4-Trimethylbenzene	49	46.9		ug/m3		95	70 - 130
1,3,5-Trimethylbenzene	53	47.0		ug/m3		89	70 - 130
Vinyl acetate	38	36.7		ug/m3		97	70 - 130
Vinyl chloride	26	29.2		ug/m3		114	70 - 130
m,p-Xylene	87	85.7		ug/m3		99	70 - 130
o-Xylene	47	41.8		ug/m3		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 340-1854/15
Matrix: Air
Analysis Batch: 1854

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	10.0	10.1		ppb v/v		101	70 - 130	5	25
Benzene	10.0	10.1		ppb v/v		101	70 - 130	1	25
Benzyl chloride	10.8	11.1		ppb v/v		103	70 - 130	2	25
Bromodichloromethane	10.0	11.1		ppb v/v		111	70 - 130	2	25
Bromoform	10.0	13.0		ppb v/v		130	70 - 130	3	25
Bromomethane	10.0	10.3		ppb v/v		103	70 - 130	2	25
2-Butanone (MEK)	10.6	9.88		ppb v/v		93	70 - 130	1	25
Carbon disulfide	10.0	11.7		ppb v/v		117	70 - 130	0	25
Carbon tetrachloride	10.0	11.9		ppb v/v		119	70 - 130	1	25
Chlorobenzene	10.7	10.3		ppb v/v		96	70 - 130	1	25
Dibromochloromethane	11.5	12.0		ppb v/v		104	70 - 130	1	25
Chloroethane	10.0	10.5		ppb v/v		105	70 - 130	1	25
Chloroform	10.0	10.7		ppb v/v		107	70 - 130	0	25
Chloromethane	10.0	10.2		ppb v/v		102	70 - 130	1	25
1,2-Dibromoethane (EDB)	10.0	10.5		ppb v/v		105	70 - 130	2	25
1,2-Dichlorobenzene	10.7	10.5		ppb v/v		98	70 - 130	3	25
1,3-Dichlorobenzene	10.8	10.4		ppb v/v		97	70 - 130	2	25
1,4-Dichlorobenzene	10.0	10.3		ppb v/v		103	70 - 130	2	25
Dichlorodifluoromethane	10.0	10.7		ppb v/v		107	70 - 130	1	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-1854/15
Matrix: Air
Analysis Batch: 1854

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	10.0	10.5		ppb v/v		105	70 - 130	0	25
1,2-Dichloroethane	10.0	10.3		ppb v/v		103	70 - 130	2	25
1,1-Dichloroethene	10.0	10.5		ppb v/v		105	70 - 130	1	25
cis-1,2-Dichloroethene	10.0	10.6		ppb v/v		106	70 - 130	0	25
trans-1,2-Dichloroethene	10.0	11.0		ppb v/v		110	70 - 130	0	25
1,2-Dichloropropane	10.0	10.1		ppb v/v		101	70 - 130	1	25
cis-1,3-Dichloropropene	10.6	11.1		ppb v/v		105	70 - 130	2	25
trans-1,3-Dichloropropene	10.0	9.27		ppb v/v		93	70 - 130	3	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	11.0		ppb v/v		110	70 - 130	3	25
Ethylbenzene	10.6	10.2		ppb v/v		97	70 - 130	2	25
4-Ethyltoluene	10.0	8.77		ppb v/v		88	70 - 130	3	25
Hexachlorobutadiene	10.0	11.5		ppb v/v		115	70 - 130	11	25
2-Hexanone	10.0	9.76		ppb v/v		98	70 - 130	4	25
Methylene chloride	10.0	9.53		ppb v/v		95	70 - 130	0	25
4-Methyl-2-pentanone (MIBK)	11.0	9.83		ppb v/v		89	70 - 130	3	25
Styrene	10.7	10.7		ppb v/v		100	70 - 130	2	25
1,1,2,2-Tetrachloroethane	10.8	10.6		ppb v/v		98	70 - 130	3	25
Tetrachloroethene	10.0	10.2		ppb v/v		102	70 - 130	2	25
Toluene	10.0	10.1		ppb v/v		101	70 - 130	1	25
1,2,4-Trichlorobenzene	10.0	11.4		ppb v/v		114	70 - 130	7	25
1,1,1-Trichloroethane	10.0	10.9		ppb v/v		109	70 - 130	1	25
1,1,2-Trichloroethane	10.0	10.4		ppb v/v		104	70 - 130	2	25
Trichloroethene	10.0	10.5		ppb v/v		105	70 - 130	0	25
Trichlorofluoromethane	10.0	11.0		ppb v/v		110	70 - 130	0	25
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.8		ppb v/v		108	70 - 130	1	25
1,2,4-Trimethylbenzene	10.0	9.82		ppb v/v		98	70 - 130	3	25
1,3,5-Trimethylbenzene	10.7	9.82		ppb v/v		92	70 - 130	3	25
Vinyl acetate	10.8	10.6		ppb v/v		98	70 - 130	2	25
Vinyl chloride	10.0	10.9		ppb v/v		109	70 - 130	4	25
m,p-Xylene	20.0	20.3		ppb v/v		101	70 - 130	3	25
o-Xylene	10.8	9.87		ppb v/v		91	70 - 130	3	25

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	24	23.9		ug/m3		101	70 - 130	5	25
Benzene	32	32.2		ug/m3		101	70 - 130	1	25
Benzyl chloride	56	57.4		ug/m3		103	70 - 130	2	25
Bromodichloromethane	67	74.5		ug/m3		111	70 - 130	2	25
Bromoform	100	134		ug/m3		130	70 - 130	3	25
Bromomethane	39	40.0		ug/m3		103	70 - 130	2	25
2-Butanone (MEK)	31	29.1		ug/m3		93	70 - 130	1	25
Carbon disulfide	31	36.5		ug/m3		117	70 - 130	0	25
Carbon tetrachloride	63	75.1		ug/m3		119	70 - 130	1	25
Chlorobenzene	49	47.3		ug/m3		96	70 - 130	1	25
Dibromochloromethane	98	102		ug/m3		104	70 - 130	1	25
Chloroethane	26	27.7		ug/m3		105	70 - 130	1	25
Chloroform	49	52.1		ug/m3		107	70 - 130	0	25
Chloromethane	21	21.0		ug/m3		102	70 - 130	1	25
1,2-Dibromoethane (EDB)	77	80.6		ug/m3		105	70 - 130	2	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-1854/15
Matrix: Air
Analysis Batch: 1854

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	64	63.1		ug/m3		98	70 - 130	3	25
1,3-Dichlorobenzene	65	62.8		ug/m3		97	70 - 130	2	25
1,4-Dichlorobenzene	60	62.1		ug/m3		103	70 - 130	2	25
Dichlorodifluoromethane	49	52.9		ug/m3		107	70 - 130	1	25
1,1-Dichloroethane	40	42.6		ug/m3		105	70 - 130	0	25
1,2-Dichloroethane	40	41.6		ug/m3		103	70 - 130	2	25
1,1-Dichloroethene	40	41.5		ug/m3		105	70 - 130	1	25
cis-1,2-Dichloroethene	40	42.0		ug/m3		106	70 - 130	0	25
trans-1,2-Dichloroethene	40	43.7		ug/m3		110	70 - 130	0	25
1,2-Dichloropropane	46	46.6		ug/m3		101	70 - 130	1	25
cis-1,3-Dichloropropene	48	50.6		ug/m3		105	70 - 130	2	25
trans-1,3-Dichloropropene	45	42.1		ug/m3		93	70 - 130	3	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	70	77.2		ug/m3		110	70 - 130	3	25
Ethylbenzene	46	44.4		ug/m3		97	70 - 130	2	25
4-Ethyltoluene	49	43.1		ug/m3		88	70 - 130	3	25
Hexachlorobutadiene	110	122		ug/m3		115	70 - 130	11	25
2-Hexanone	41	40.0		ug/m3		98	70 - 130	4	25
Methylene chloride	35	33.1		ug/m3		95	70 - 130	0	25
4-Methyl-2-pentanone (MIBK)	45	40.3		ug/m3		89	70 - 130	3	25
Styrene	46	45.6		ug/m3		100	70 - 130	2	25
1,1,2,2-Tetrachloroethane	74	72.8		ug/m3		98	70 - 130	3	25
Tetrachloroethene	68	69.3		ug/m3		102	70 - 130	2	25
Toluene	38	38.1		ug/m3		101	70 - 130	1	25
1,2,4-Trichlorobenzene	74	84.3		ug/m3		114	70 - 130	7	25
1,1,1-Trichloroethane	55	59.6		ug/m3		109	70 - 130	1	25
1,1,2-Trichloroethane	55	57.0		ug/m3		104	70 - 130	2	25
Trichloroethene	54	56.2		ug/m3		105	70 - 130	0	25
Trichlorofluoromethane	56	61.6		ug/m3		110	70 - 130	0	25
1,1,2-Trichloro-1,2,2-trifluoroethane	77	82.5		ug/m3		108	70 - 130	1	25
1,2,4-Trimethylbenzene	49	48.3		ug/m3		98	70 - 130	3	25
1,3,5-Trimethylbenzene	53	48.3		ug/m3		92	70 - 130	3	25
Vinyl acetate	38	37.3		ug/m3		98	70 - 130	2	25
Vinyl chloride	26	27.9		ug/m3		109	70 - 130	4	25
m,p-Xylene	87	88.0		ug/m3		101	70 - 130	3	25
o-Xylene	47	42.8		ug/m3		91	70 - 130	3	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 340-1863/5
Matrix: Air
Analysis Batch: 1863

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.80	0.30	ppb v/v			06/19/12 11:55	1
Benzene	ND		0.30	0.15	ppb v/v			06/19/12 11:55	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-1863/5
Matrix: Air
Analysis Batch: 1863

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzyl chloride	ND		0.80	0.25	ppb v/v			06/19/12 11:55	1
Bromodichloromethane	ND		0.30	0.15	ppb v/v			06/19/12 11:55	1
Bromoform	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
Bromomethane	ND		0.80	0.20	ppb v/v			06/19/12 11:55	1
2-Butanone (MEK)	ND		0.80	0.40	ppb v/v			06/19/12 11:55	1
Carbon disulfide	ND		0.80	0.20	ppb v/v			06/19/12 11:55	1
Carbon tetrachloride	ND		0.80	0.25	ppb v/v			06/19/12 11:55	1
Chlorobenzene	ND		0.30	0.10	ppb v/v			06/19/12 11:55	1
Dibromochloromethane	ND		0.40	0.10	ppb v/v			06/19/12 11:55	1
Chloroethane	ND		0.80	0.20	ppb v/v			06/19/12 11:55	1
Chloroform	ND		0.30	0.10	ppb v/v			06/19/12 11:55	1
Chloromethane	ND		0.80	0.20	ppb v/v			06/19/12 11:55	1
1,2-Dibromoethane (EDB)	ND		0.80	0.20	ppb v/v			06/19/12 11:55	1
1,2-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 11:55	1
1,3-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 11:55	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/19/12 11:55	1
Dichlorodifluoromethane	ND		0.40	0.15	ppb v/v			06/19/12 11:55	1
1,1-Dichloroethane	ND		0.30	0.15	ppb v/v			06/19/12 11:55	1
1,2-Dichloroethane	ND		0.80	0.30	ppb v/v			06/19/12 11:55	1
1,1-Dichloroethene	ND		0.80	0.20	ppb v/v			06/19/12 11:55	1
cis-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
trans-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
1,2-Dichloropropane	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
cis-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
trans-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
Ethylbenzene	ND		0.40	0.15	ppb v/v			06/19/12 11:55	1
4-Ethyltoluene	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
Hexachlorobutadiene	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
2-Hexanone	ND		0.40	0.25	ppb v/v			06/19/12 11:55	1
Methylene chloride	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
Styrene	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.10	ppb v/v			06/19/12 11:55	1
Tetrachloroethene	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
Toluene	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
1,2,4-Trichlorobenzene	ND		2.5	1.0	ppb v/v			06/19/12 11:55	1
1,1,1-Trichloroethane	ND		0.30	0.15	ppb v/v			06/19/12 11:55	1
1,1,2-Trichloroethane	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
Trichloroethene	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
Trichlorofluoromethane	ND		0.40	0.15	ppb v/v			06/19/12 11:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1
1,2,4-Trimethylbenzene	ND		2.5	0.25	ppb v/v			06/19/12 11:55	1
1,3,5-Trimethylbenzene	ND		0.40	0.25	ppb v/v			06/19/12 11:55	1
Vinyl acetate	ND		0.80	0.20	ppb v/v			06/19/12 11:55	1
Vinyl chloride	ND		0.20	0.10	ppb v/v			06/19/12 11:55	1
m,p-Xylene	ND		0.80	0.20	ppb v/v			06/19/12 11:55	1
o-Xylene	ND		0.40	0.20	ppb v/v			06/19/12 11:55	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-1863/5
Matrix: Air
Analysis Batch: 1863

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1.9	0.71	ug/m3			06/19/12 11:55	1
Benzene	ND		0.96	0.48	ug/m3			06/19/12 11:55	1
Benzyl chloride	ND		4.1	1.3	ug/m3			06/19/12 11:55	1
Bromodichloromethane	ND		2.0	1.0	ug/m3			06/19/12 11:55	1
Bromoform	ND		4.1	2.1	ug/m3			06/19/12 11:55	1
Bromomethane	ND		3.1	0.78	ug/m3			06/19/12 11:55	1
2-Butanone (MEK)	ND		2.4	1.2	ug/m3			06/19/12 11:55	1
Carbon disulfide	ND		2.5	0.62	ug/m3			06/19/12 11:55	1
Carbon tetrachloride	ND		5.0	1.6	ug/m3			06/19/12 11:55	1
Chlorobenzene	ND		1.4	0.46	ug/m3			06/19/12 11:55	1
Dibromochloromethane	ND		3.4	0.85	ug/m3			06/19/12 11:55	1
Chloroethane	ND		2.1	0.53	ug/m3			06/19/12 11:55	1
Chloroform	ND		1.5	0.49	ug/m3			06/19/12 11:55	1
Chloromethane	ND		1.7	0.41	ug/m3			06/19/12 11:55	1
1,2-Dibromoethane (EDB)	ND		6.1	1.5	ug/m3			06/19/12 11:55	1
1,2-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 11:55	1
1,3-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 11:55	1
1,4-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/19/12 11:55	1
Dichlorodifluoromethane	ND		2.0	0.74	ug/m3			06/19/12 11:55	1
1,1-Dichloroethane	ND		1.2	0.61	ug/m3			06/19/12 11:55	1
1,2-Dichloroethane	ND		3.2	1.2	ug/m3			06/19/12 11:55	1
1,1-Dichloroethene	ND		3.2	0.79	ug/m3			06/19/12 11:55	1
cis-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/19/12 11:55	1
trans-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/19/12 11:55	1
1,2-Dichloropropane	ND		1.8	0.92	ug/m3			06/19/12 11:55	1
cis-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/19/12 11:55	1
trans-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/19/12 11:55	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8	1.4	ug/m3			06/19/12 11:55	1
Ethylbenzene	ND		1.7	0.65	ug/m3			06/19/12 11:55	1
4-Ethyltoluene	ND		2.0	0.98	ug/m3			06/19/12 11:55	1
Hexachlorobutadiene	ND		4.3	2.1	ug/m3			06/19/12 11:55	1
2-Hexanone	ND		1.6	1.0	ug/m3			06/19/12 11:55	1
Methylene chloride	ND		1.4	0.69	ug/m3			06/19/12 11:55	1
4-Methyl-2-pentanone (MIBK)	ND		1.6	0.82	ug/m3			06/19/12 11:55	1
Styrene	ND		1.7	0.85	ug/m3			06/19/12 11:55	1
1,1,2,2-Tetrachloroethane	ND		2.7	0.69	ug/m3			06/19/12 11:55	1
Tetrachloroethene	ND		2.7	1.4	ug/m3			06/19/12 11:55	1
Toluene	ND		1.5	0.75	ug/m3			06/19/12 11:55	1
1,2,4-Trichlorobenzene	ND		19	7.4	ug/m3			06/19/12 11:55	1
1,1,1-Trichloroethane	ND		1.6	0.82	ug/m3			06/19/12 11:55	1
1,1,2-Trichloroethane	ND		2.2	1.1	ug/m3			06/19/12 11:55	1
Trichloroethene	ND		2.1	1.1	ug/m3			06/19/12 11:55	1
Trichlorofluoromethane	ND		2.2	0.84	ug/m3			06/19/12 11:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.5	ug/m3			06/19/12 11:55	1
1,2,4-Trimethylbenzene	ND		12	1.2	ug/m3			06/19/12 11:55	1
1,3,5-Trimethylbenzene	ND		2.0	1.2	ug/m3			06/19/12 11:55	1
Vinyl acetate	ND		2.8	0.70	ug/m3			06/19/12 11:55	1
Vinyl chloride	ND		0.51	0.26	ug/m3			06/19/12 11:55	1
m,p-Xylene	ND		3.5	0.87	ug/m3			06/19/12 11:55	1
o-Xylene	ND		1.7	0.87	ug/m3			06/19/12 11:55	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-1863/5
Matrix: Air
Analysis Batch: 1863

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130		06/19/12 11:55	1
1,2-Dichloroethane-d4 (Surr)	106		70 - 130		06/19/12 11:55	1
Toluene-d8 (Surr)	100		70 - 130		06/19/12 11:55	1

Lab Sample ID: LCS 340-1863/3
Matrix: Air
Analysis Batch: 1863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10.0	10.0		ppb v/v		100	70 - 130
Benzene	10.0	10.1		ppb v/v		101	70 - 130
Benzyl chloride	10.8	11.0		ppb v/v		102	70 - 130
Bromodichloromethane	10.0	11.4		ppb v/v		114	70 - 130
Bromoform	10.0	13.2	*	ppb v/v		132	70 - 130
Bromomethane	10.0	10.8		ppb v/v		108	70 - 130
2-Butanone (MEK)	10.6	9.50		ppb v/v		90	70 - 130
Carbon disulfide	10.0	11.3		ppb v/v		113	70 - 130
Carbon tetrachloride	10.0	12.1		ppb v/v		121	70 - 130
Chlorobenzene	10.7	10.2		ppb v/v		95	70 - 130
Dibromochloromethane	11.5	12.1		ppb v/v		105	70 - 130
Chloroethane	10.0	11.0		ppb v/v		110	70 - 130
Chloroform	10.0	10.5		ppb v/v		105	70 - 130
Chloromethane	10.0	10.7		ppb v/v		107	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.4		ppb v/v		104	70 - 130
1,2-Dichlorobenzene	10.7	10.4		ppb v/v		97	70 - 130
1,3-Dichlorobenzene	10.8	10.3		ppb v/v		96	70 - 130
1,4-Dichlorobenzene	10.0	10.2		ppb v/v		102	70 - 130
Dichlorodifluoromethane	10.0	10.8		ppb v/v		108	70 - 130
1,1-Dichloroethane	10.0	10.4		ppb v/v		104	70 - 130
1,2-Dichloroethane	10.0	10.8		ppb v/v		108	70 - 130
1,1-Dichloroethene	10.0	10.4		ppb v/v		104	70 - 130
cis-1,2-Dichloroethene	10.0	10.1		ppb v/v		101	70 - 130
trans-1,2-Dichloroethene	10.0	10.5		ppb v/v		105	70 - 130
1,2-Dichloropropane	10.0	10.3		ppb v/v		103	70 - 130
cis-1,3-Dichloropropene	10.6	11.3		ppb v/v		107	70 - 130
trans-1,3-Dichloropropene	10.0	9.44		ppb v/v		94	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	11.7		ppb v/v		117	70 - 130
Ethylbenzene	10.6	10.2		ppb v/v		96	70 - 130
4-Ethyltoluene	10.0	8.93		ppb v/v		89	70 - 130
Hexachlorobutadiene	10.0	11.4		ppb v/v		114	70 - 130
2-Hexanone	10.0	9.52		ppb v/v		95	70 - 130
Methylene chloride	10.0	9.55		ppb v/v		96	70 - 130
4-Methyl-2-pentanone (MIBK)	11.0	10.1		ppb v/v		91	70 - 130
Styrene	10.7	10.6		ppb v/v		99	70 - 130
1,1,2,2-Tetrachloroethane	10.8	10.5		ppb v/v		98	70 - 130
Tetrachloroethene	10.0	10.2		ppb v/v		102	70 - 130
Toluene	10.0	10.2		ppb v/v		102	70 - 130
1,2,4-Trichlorobenzene	10.0	10.9		ppb v/v		109	70 - 130
1,1,1-Trichloroethane	10.0	10.7		ppb v/v		107	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-1863/3
Matrix: Air
Analysis Batch: 1863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	10.0	10.5		ppb v/v		105	70 - 130
Trichloroethene	10.0	10.6		ppb v/v		106	70 - 130
Trichlorofluoromethane	10.0	11.0		ppb v/v		110	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.5		ppb v/v		105	70 - 130
1,2,4-Trimethylbenzene	10.0	9.78		ppb v/v		98	70 - 130
1,3,5-Trimethylbenzene	10.7	9.46		ppb v/v		88	70 - 130
Vinyl acetate	10.8	10.4		ppb v/v		97	70 - 130
Vinyl chloride	10.0	11.5		ppb v/v		115	70 - 130
m,p-Xylene	20.0	20.6		ppb v/v		103	70 - 130
o-Xylene	10.8	9.93		ppb v/v		92	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	24	23.8		ug/m3		100	70 - 130
Benzene	32	32.4		ug/m3		101	70 - 130
Benzyl chloride	56	56.8		ug/m3		102	70 - 130
Bromodichloromethane	67	76.7		ug/m3		114	70 - 130
Bromoform	100	137	*	ug/m3		132	70 - 130
Bromomethane	39	42.0		ug/m3		108	70 - 130
2-Butanone (MEK)	31	28.0		ug/m3		90	70 - 130
Carbon disulfide	31	35.0		ug/m3		113	70 - 130
Carbon tetrachloride	63	75.8		ug/m3		121	70 - 130
Chlorobenzene	49	46.6		ug/m3		95	70 - 130
Dibromochloromethane	98	103		ug/m3		105	70 - 130
Chloroethane	26	29.1		ug/m3		110	70 - 130
Chloroform	49	51.2		ug/m3		105	70 - 130
Chloromethane	21	22.2		ug/m3		107	70 - 130
1,2-Dibromoethane (EDB)	77	79.6		ug/m3		104	70 - 130
1,2-Dichlorobenzene	64	62.3		ug/m3		97	70 - 130
1,3-Dichlorobenzene	65	62.2		ug/m3		96	70 - 130
1,4-Dichlorobenzene	60	61.5		ug/m3		102	70 - 130
Dichlorodifluoromethane	49	53.6		ug/m3		108	70 - 130
1,1-Dichloroethane	40	42.0		ug/m3		104	70 - 130
1,2-Dichloroethane	40	43.8		ug/m3		108	70 - 130
1,1-Dichloroethene	40	41.2		ug/m3		104	70 - 130
cis-1,2-Dichloroethene	40	40.1		ug/m3		101	70 - 130
trans-1,2-Dichloroethene	40	41.8		ug/m3		105	70 - 130
1,2-Dichloropropane	46	47.6		ug/m3		103	70 - 130
cis-1,3-Dichloropropene	48	51.3		ug/m3		107	70 - 130
trans-1,3-Dichloropropene	45	42.9		ug/m3		94	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	70	81.7		ug/m3		117	70 - 130
Ethylbenzene	46	44.2		ug/m3		96	70 - 130
4-Ethyltoluene	49	43.9		ug/m3		89	70 - 130
Hexachlorobutadiene	110	121		ug/m3		114	70 - 130
2-Hexanone	41	39.0		ug/m3		95	70 - 130
Methylene chloride	35	33.2		ug/m3		96	70 - 130
4-Methyl-2-pentanone (MIBK)	45	41.2		ug/m3		91	70 - 130
Styrene	46	45.0		ug/m3		99	70 - 130
1,1,2,2-Tetrachloroethane	74	72.3		ug/m3		98	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-1863/3
Matrix: Air
Analysis Batch: 1863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	68	69.3		ug/m3		102	70 - 130
Toluene	38	38.5		ug/m3		102	70 - 130
1,2,4-Trichlorobenzene	74	81.1		ug/m3		109	70 - 130
1,1,1-Trichloroethane	55	58.3		ug/m3		107	70 - 130
1,1,2-Trichloroethane	55	57.2		ug/m3		105	70 - 130
Trichloroethene	54	56.7		ug/m3		106	70 - 130
Trichlorofluoromethane	56	61.9		ug/m3		110	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	77	80.6		ug/m3		105	70 - 130
1,2,4-Trimethylbenzene	49	48.1		ug/m3		98	70 - 130
1,3,5-Trimethylbenzene	53	46.5		ug/m3		88	70 - 130
Vinyl acetate	38	36.7		ug/m3		97	70 - 130
Vinyl chloride	26	29.5		ug/m3		115	70 - 130
m,p-Xylene	87	89.3		ug/m3		103	70 - 130
o-Xylene	47	43.1		ug/m3		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 340-1863/4
Matrix: Air
Analysis Batch: 1863

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	10.0	10.1		ppb v/v		101	70 - 130	1	25
Benzene	10.0	10.2		ppb v/v		102	70 - 130	1	25
Benzyl chloride	10.8	11.1		ppb v/v		103	70 - 130	2	25
Bromodichloromethane	10.0	11.6		ppb v/v		116	70 - 130	1	25
Bromoform	10.0	13.5	*	ppb v/v		135	70 - 130	2	25
Bromomethane	10.0	11.0		ppb v/v		110	70 - 130	2	25
2-Butanone (MEK)	10.6	9.68		ppb v/v		91	70 - 130	2	25
Carbon disulfide	10.0	11.4		ppb v/v		114	70 - 130	1	25
Carbon tetrachloride	10.0	12.2		ppb v/v		122	70 - 130	1	25
Chlorobenzene	10.7	10.2		ppb v/v		96	70 - 130	1	25
Dibromochloromethane	11.5	12.3		ppb v/v		107	70 - 130	2	25
Chloroethane	10.0	11.2		ppb v/v		112	70 - 130	2	25
Chloroform	10.0	10.7		ppb v/v		107	70 - 130	2	25
Chloromethane	10.0	10.9		ppb v/v		109	70 - 130	2	25
1,2-Dibromoethane (EDB)	10.0	10.4		ppb v/v		104	70 - 130	1	25
1,2-Dichlorobenzene	10.7	10.5		ppb v/v		98	70 - 130	1	25
1,3-Dichlorobenzene	10.8	10.5		ppb v/v		97	70 - 130	1	25
1,4-Dichlorobenzene	10.0	10.4		ppb v/v		104	70 - 130	1	25
Dichlorodifluoromethane	10.0	11.1		ppb v/v		111	70 - 130	2	25
1,1-Dichloroethane	10.0	10.6		ppb v/v		106	70 - 130	2	25
1,2-Dichloroethane	10.0	10.9		ppb v/v		109	70 - 130	1	25
1,1-Dichloroethene	10.0	10.6		ppb v/v		106	70 - 130	2	25
cis-1,2-Dichloroethene	10.0	10.3		ppb v/v		103	70 - 130	2	25
trans-1,2-Dichloroethene	10.0	10.8		ppb v/v		108	70 - 130	2	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-1863/4
Matrix: Air
Analysis Batch: 1863

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane	10.0	10.4		ppb v/v		104	70 - 130	1	25
cis-1,3-Dichloropropene	10.6	11.4		ppb v/v		107	70 - 130	1	25
trans-1,3-Dichloropropene	10.0	9.52		ppb v/v		95	70 - 130	1	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	12.0		ppb v/v		120	70 - 130	2	25
Ethylbenzene	10.6	10.2		ppb v/v		97	70 - 130	1	25
4-Ethyltoluene	10.0	8.82		ppb v/v		88	70 - 130	1	25
Hexachlorobutadiene	10.0	11.8		ppb v/v		118	70 - 130	4	25
2-Hexanone	10.0	9.57		ppb v/v		96	70 - 130	1	25
Methylene chloride	10.0	9.69		ppb v/v		97	70 - 130	1	25
4-Methyl-2-pentanone (MIBK)	11.0	10.1		ppb v/v		91	70 - 130	0	25
Styrene	10.7	10.7		ppb v/v		100	70 - 130	1	25
1,1,2,2-Tetrachloroethane	10.8	10.7		ppb v/v		99	70 - 130	1	25
Tetrachloroethene	10.0	10.3		ppb v/v		103	70 - 130	1	25
Toluene	10.0	10.3		ppb v/v		103	70 - 130	1	25
1,2,4-Trichlorobenzene	10.0	11.3		ppb v/v		113	70 - 130	4	25
1,1,1-Trichloroethane	10.0	10.9		ppb v/v		109	70 - 130	2	25
1,1,2-Trichloroethane	10.0	10.5		ppb v/v		105	70 - 130	1	25
Trichloroethene	10.0	10.6		ppb v/v		106	70 - 130	1	25
Trichlorofluoromethane	10.0	11.2		ppb v/v		112	70 - 130	2	25
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.8		ppb v/v		108	70 - 130	2	25
1,2,4-Trimethylbenzene	10.0	9.87		ppb v/v		99	70 - 130	1	25
1,3,5-Trimethylbenzene	10.7	9.78		ppb v/v		91	70 - 130	3	25
Vinyl acetate	10.8	10.7		ppb v/v		99	70 - 130	2	25
Vinyl chloride	10.0	11.8		ppb v/v		118	70 - 130	2	25
m,p-Xylene	20.0	20.7		ppb v/v		104	70 - 130	1	25
o-Xylene	10.8	9.99		ppb v/v		93	70 - 130	1	25

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	24	24.1		ug/m3		101	70 - 130	1	25
Benzene	32	32.7		ug/m3		102	70 - 130	1	25
Benzyl chloride	56	57.6		ug/m3		103	70 - 130	2	25
Bromodichloromethane	67	77.7		ug/m3		116	70 - 130	1	25
Bromoform	100	139	*	ug/m3		135	70 - 130	2	25
Bromomethane	39	42.7		ug/m3		110	70 - 130	2	25
2-Butanone (MEK)	31	28.6		ug/m3		91	70 - 130	2	25
Carbon disulfide	31	35.6		ug/m3		114	70 - 130	1	25
Carbon tetrachloride	63	76.6		ug/m3		122	70 - 130	1	25
Chlorobenzene	49	47.0		ug/m3		96	70 - 130	1	25
Dibromochloromethane	98	105		ug/m3		107	70 - 130	2	25
Chloroethane	26	29.7		ug/m3		112	70 - 130	2	25
Chloroform	49	52.1		ug/m3		107	70 - 130	2	25
Chloromethane	21	22.6		ug/m3		109	70 - 130	2	25
1,2-Dibromoethane (EDB)	77	80.0		ug/m3		104	70 - 130	1	25
1,2-Dichlorobenzene	64	63.1		ug/m3		98	70 - 130	1	25
1,3-Dichlorobenzene	65	63.1		ug/m3		97	70 - 130	1	25
1,4-Dichlorobenzene	60	62.3		ug/m3		104	70 - 130	1	25
Dichlorodifluoromethane	49	54.9		ug/m3		111	70 - 130	2	25
1,1-Dichloroethane	40	42.7		ug/m3		106	70 - 130	2	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-1863/4
Matrix: Air
Analysis Batch: 1863

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane			40	44.1		ug/m3		109	70 - 130	1	25
1,1-Dichloroethene			40	42.0		ug/m3		106	70 - 130	2	25
cis-1,2-Dichloroethene			40	41.0		ug/m3		103	70 - 130	2	25
trans-1,2-Dichloroethene			40	42.6		ug/m3		108	70 - 130	2	25
1,2-Dichloropropane			46	48.1		ug/m3		104	70 - 130	1	25
cis-1,3-Dichloropropene			48	51.7		ug/m3		107	70 - 130	1	25
trans-1,3-Dichloropropene			45	43.2		ug/m3		95	70 - 130	1	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane			70	83.5		ug/m3		120	70 - 130	2	25
Ethylbenzene			46	44.5		ug/m3		97	70 - 130	1	25
4-Ethyltoluene			49	43.4		ug/m3		88	70 - 130	1	25
Hexachlorobutadiene			110	126		ug/m3		118	70 - 130	4	25
2-Hexanone			41	39.2		ug/m3		96	70 - 130	1	25
Methylene chloride			35	33.7		ug/m3		97	70 - 130	1	25
4-Methyl-2-pentanone (MIBK)			45	41.2		ug/m3		91	70 - 130	0	25
Styrene			46	45.6		ug/m3		100	70 - 130	1	25
1,1,2,2-Tetrachloroethane			74	73.2		ug/m3		99	70 - 130	1	25
Tetrachloroethene			68	69.9		ug/m3		103	70 - 130	1	25
Toluene			38	38.7		ug/m3		103	70 - 130	1	25
1,2,4-Trichlorobenzene			74	84.2		ug/m3		113	70 - 130	4	25
1,1,1-Trichloroethane			55	59.4		ug/m3		109	70 - 130	2	25
1,1,2-Trichloroethane			55	57.6		ug/m3		105	70 - 130	1	25
Trichloroethene			54	57.1		ug/m3		106	70 - 130	1	25
Trichlorofluoromethane			56	63.1		ug/m3		112	70 - 130	2	25
1,1,2-Trichloro-1,2,2-trifluoroethane			77	82.5		ug/m3		108	70 - 130	2	25
1,2,4-Trimethylbenzene			49	48.5		ug/m3		99	70 - 130	1	25
1,3,5-Trimethylbenzene			53	48.1		ug/m3		91	70 - 130	3	25
Vinyl acetate			38	37.6		ug/m3		99	70 - 130	2	25
Vinyl chloride			26	30.1		ug/m3		118	70 - 130	2	25
m,p-Xylene			87	90.0		ug/m3		104	70 - 130	1	25
o-Xylene			47	43.4		ug/m3		93	70 - 130	1	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 340-1873/5
Matrix: Air
Analysis Batch: 1873

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.80	0.30	ppb v/v			06/20/12 12:18	1
Benzene	ND		0.30	0.15	ppb v/v			06/20/12 12:18	1
Benzyl chloride	ND		0.80	0.25	ppb v/v			06/20/12 12:18	1
Bromodichloromethane	ND		0.30	0.15	ppb v/v			06/20/12 12:18	1
Bromoform	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
Bromomethane	ND		0.80	0.20	ppb v/v			06/20/12 12:18	1
2-Butanone (MEK)	ND		0.80	0.40	ppb v/v			06/20/12 12:18	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-1873/5
Matrix: Air
Analysis Batch: 1873

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.80	0.20	ppb v/v			06/20/12 12:18	1
Carbon tetrachloride	ND		0.80	0.25	ppb v/v			06/20/12 12:18	1
Chlorobenzene	ND		0.30	0.10	ppb v/v			06/20/12 12:18	1
Dibromochloromethane	ND		0.40	0.10	ppb v/v			06/20/12 12:18	1
Chloroethane	ND		0.80	0.20	ppb v/v			06/20/12 12:18	1
Chloroform	ND		0.30	0.10	ppb v/v			06/20/12 12:18	1
Chloromethane	ND		0.80	0.20	ppb v/v			06/20/12 12:18	1
1,2-Dibromoethane (EDB)	ND		0.80	0.20	ppb v/v			06/20/12 12:18	1
1,2-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/20/12 12:18	1
1,3-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/20/12 12:18	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/20/12 12:18	1
Dichlorodifluoromethane	ND		0.40	0.15	ppb v/v			06/20/12 12:18	1
1,1-Dichloroethane	ND		0.30	0.15	ppb v/v			06/20/12 12:18	1
1,2-Dichloroethane	ND		0.80	0.30	ppb v/v			06/20/12 12:18	1
1,1-Dichloroethene	ND		0.80	0.20	ppb v/v			06/20/12 12:18	1
cis-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
trans-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
1,2-Dichloropropane	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
cis-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
trans-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
Ethylbenzene	ND		0.40	0.15	ppb v/v			06/20/12 12:18	1
4-Ethyltoluene	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
Hexachlorobutadiene	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
2-Hexanone	ND		0.40	0.25	ppb v/v			06/20/12 12:18	1
Methylene chloride	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
Styrene	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.10	ppb v/v			06/20/12 12:18	1
Tetrachloroethene	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
Toluene	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
1,2,4-Trichlorobenzene	ND		2.5	1.0	ppb v/v			06/20/12 12:18	1
1,1,1-Trichloroethane	ND		0.30	0.15	ppb v/v			06/20/12 12:18	1
1,1,2-Trichloroethane	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
Trichloroethene	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
Trichlorofluoromethane	ND		0.40	0.15	ppb v/v			06/20/12 12:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1
1,2,4-Trimethylbenzene	ND		2.5	0.25	ppb v/v			06/20/12 12:18	1
1,3,5-Trimethylbenzene	ND		0.40	0.25	ppb v/v			06/20/12 12:18	1
Vinyl acetate	ND		0.80	0.20	ppb v/v			06/20/12 12:18	1
Vinyl chloride	ND		0.20	0.10	ppb v/v			06/20/12 12:18	1
m,p-Xylene	ND		0.80	0.20	ppb v/v			06/20/12 12:18	1
o-Xylene	ND		0.40	0.20	ppb v/v			06/20/12 12:18	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1.9	0.71	ug/m3			06/20/12 12:18	1
Benzene	ND		0.96	0.48	ug/m3			06/20/12 12:18	1
Benzyl chloride	ND		4.1	1.3	ug/m3			06/20/12 12:18	1
Bromodichloromethane	ND		2.0	1.0	ug/m3			06/20/12 12:18	1
Bromoform	ND		4.1	2.1	ug/m3			06/20/12 12:18	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-1873/5
Matrix: Air
Analysis Batch: 1873

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		3.1	0.78	ug/m3			06/20/12 12:18	1
2-Butanone (MEK)	ND		2.4	1.2	ug/m3			06/20/12 12:18	1
Carbon disulfide	ND		2.5	0.62	ug/m3			06/20/12 12:18	1
Carbon tetrachloride	ND		5.0	1.6	ug/m3			06/20/12 12:18	1
Chlorobenzene	ND		1.4	0.46	ug/m3			06/20/12 12:18	1
Dibromochloromethane	ND		3.4	0.85	ug/m3			06/20/12 12:18	1
Chloroethane	ND		2.1	0.53	ug/m3			06/20/12 12:18	1
Chloroform	ND		1.5	0.49	ug/m3			06/20/12 12:18	1
Chloromethane	ND		1.7	0.41	ug/m3			06/20/12 12:18	1
1,2-Dibromoethane (EDB)	ND		6.1	1.5	ug/m3			06/20/12 12:18	1
1,2-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/20/12 12:18	1
1,3-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/20/12 12:18	1
1,4-Dichlorobenzene	ND		2.4	0.90	ug/m3			06/20/12 12:18	1
Dichlorodifluoromethane	ND		2.0	0.74	ug/m3			06/20/12 12:18	1
1,1-Dichloroethane	ND		1.2	0.61	ug/m3			06/20/12 12:18	1
1,2-Dichloroethane	ND		3.2	1.2	ug/m3			06/20/12 12:18	1
1,1-Dichloroethene	ND		3.2	0.79	ug/m3			06/20/12 12:18	1
cis-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/20/12 12:18	1
trans-1,2-Dichloroethene	ND		1.6	0.79	ug/m3			06/20/12 12:18	1
1,2-Dichloropropane	ND		1.8	0.92	ug/m3			06/20/12 12:18	1
cis-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/20/12 12:18	1
trans-1,3-Dichloropropene	ND		1.8	0.91	ug/m3			06/20/12 12:18	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8	1.4	ug/m3			06/20/12 12:18	1
Ethylbenzene	ND		1.7	0.65	ug/m3			06/20/12 12:18	1
4-Ethyltoluene	ND		2.0	0.98	ug/m3			06/20/12 12:18	1
Hexachlorobutadiene	ND		4.3	2.1	ug/m3			06/20/12 12:18	1
2-Hexanone	ND		1.6	1.0	ug/m3			06/20/12 12:18	1
Methylene chloride	ND		1.4	0.69	ug/m3			06/20/12 12:18	1
4-Methyl-2-pentanone (MIBK)	ND		1.6	0.82	ug/m3			06/20/12 12:18	1
Styrene	ND		1.7	0.85	ug/m3			06/20/12 12:18	1
1,1,2,2-Tetrachloroethane	ND		2.7	0.69	ug/m3			06/20/12 12:18	1
Tetrachloroethene	ND		2.7	1.4	ug/m3			06/20/12 12:18	1
Toluene	ND		1.5	0.75	ug/m3			06/20/12 12:18	1
1,2,4-Trichlorobenzene	ND		19	7.4	ug/m3			06/20/12 12:18	1
1,1,1-Trichloroethane	ND		1.6	0.82	ug/m3			06/20/12 12:18	1
1,1,2-Trichloroethane	ND		2.2	1.1	ug/m3			06/20/12 12:18	1
Trichloroethene	ND		2.1	1.1	ug/m3			06/20/12 12:18	1
Trichlorofluoromethane	ND		2.2	0.84	ug/m3			06/20/12 12:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.5	ug/m3			06/20/12 12:18	1
1,2,4-Trimethylbenzene	ND		12	1.2	ug/m3			06/20/12 12:18	1
1,3,5-Trimethylbenzene	ND		2.0	1.2	ug/m3			06/20/12 12:18	1
Vinyl acetate	ND		2.8	0.70	ug/m3			06/20/12 12:18	1
Vinyl chloride	ND		0.51	0.26	ug/m3			06/20/12 12:18	1
m,p-Xylene	ND		3.5	0.87	ug/m3			06/20/12 12:18	1
o-Xylene	ND		1.7	0.87	ug/m3			06/20/12 12:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*06/20/12 12:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/20/12 12:18*	*1*

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-1873/5
Matrix: Air
Analysis Batch: 1873

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130		06/20/12 12:18	1

Lab Sample ID: LCS 340-1873/3
Matrix: Air
Analysis Batch: 1873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10.0	10.1		ppb v/v		101	70 - 130
Benzene	10.0	10.3		ppb v/v		103	70 - 130
Benzyl chloride	10.8	11.3		ppb v/v		105	70 - 130
Bromodichloromethane	10.0	12.1		ppb v/v		121	70 - 130
Bromoform	10.0	13.8	*	ppb v/v		138	70 - 130
Bromomethane	10.0	10.7		ppb v/v		107	70 - 130
2-Butanone (MEK)	10.6	9.03		ppb v/v		85	70 - 130
Carbon disulfide	10.0	10.8		ppb v/v		108	70 - 130
Carbon tetrachloride	10.0	12.4		ppb v/v		124	70 - 130
Chlorobenzene	10.7	10.0		ppb v/v		94	70 - 130
Dibromochloromethane	11.5	12.3		ppb v/v		107	70 - 130
Chloroethane	10.0	10.5		ppb v/v		105	70 - 130
Chloroform	10.0	10.2		ppb v/v		102	70 - 130
Chloromethane	10.0	10.4		ppb v/v		104	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.3		ppb v/v		103	70 - 130
1,2-Dichlorobenzene	10.7	10.3		ppb v/v		97	70 - 130
1,3-Dichlorobenzene	10.8	10.3		ppb v/v		95	70 - 130
1,4-Dichlorobenzene	10.0	10.2		ppb v/v		102	70 - 130
Dichlorodifluoromethane	10.0	10.8		ppb v/v		108	70 - 130
1,1-Dichloroethane	10.0	10.2		ppb v/v		102	70 - 130
1,2-Dichloroethane	10.0	11.4		ppb v/v		114	70 - 130
1,1-Dichloroethene	10.0	10.2		ppb v/v		102	70 - 130
cis-1,2-Dichloroethene	10.0	9.69		ppb v/v		97	70 - 130
trans-1,2-Dichloroethene	10.0	10.0		ppb v/v		100	70 - 130
1,2-Dichloropropane	10.0	10.7		ppb v/v		107	70 - 130
cis-1,3-Dichloropropene	10.6	11.6		ppb v/v		109	70 - 130
trans-1,3-Dichloropropene	10.0	9.88		ppb v/v		99	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	11.9		ppb v/v		119	70 - 130
Ethylbenzene	10.6	10.2		ppb v/v		96	70 - 130
4-Ethyltoluene	10.0	8.74		ppb v/v		87	70 - 130
Hexachlorobutadiene	10.0	12.0		ppb v/v		120	70 - 130
2-Hexanone	10.0	9.74		ppb v/v		97	70 - 130
Methylene chloride	10.0	9.50		ppb v/v		95	70 - 130
4-Methyl-2-pentanone (MIBK)	11.0	10.5		ppb v/v		95	70 - 130
Styrene	10.7	10.7		ppb v/v		100	70 - 130
1,1,2,2-Tetrachloroethane	10.8	10.7		ppb v/v		99	70 - 130
Tetrachloroethene	10.0	10.3		ppb v/v		103	70 - 130
Toluene	10.0	10.4		ppb v/v		104	70 - 130
1,2,4-Trichlorobenzene	10.0	11.1		ppb v/v		111	70 - 130
1,1,1-Trichloroethane	10.0	10.4		ppb v/v		104	70 - 130
1,1,2-Trichloroethane	10.0	10.6		ppb v/v		106	70 - 130
Trichloroethene	10.0	10.6		ppb v/v		106	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-1873/3
Matrix: Air
Analysis Batch: 1873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	10.0	10.9		ppb v/v		109	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.99		ppb v/v		100	70 - 130
1,2,4-Trimethylbenzene	10.0	9.88		ppb v/v		99	70 - 130
1,3,5-Trimethylbenzene	10.7	9.86		ppb v/v		92	70 - 130
Vinyl acetate	10.8	10.4		ppb v/v		96	70 - 130
Vinyl chloride	10.0	11.1		ppb v/v		111	70 - 130
m,p-Xylene	20.0	21.1		ppb v/v		105	70 - 130
o-Xylene	10.8	10.1		ppb v/v		94	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	24	24.0		ug/m3		101	70 - 130
Benzene	32	33.0		ug/m3		103	70 - 130
Benzyl chloride	56	58.6		ug/m3		105	70 - 130
Bromodichloromethane	67	81.0		ug/m3		121	70 - 130
Bromoform	100	142	*	ug/m3		138	70 - 130
Bromomethane	39	41.4		ug/m3		107	70 - 130
2-Butanone (MEK)	31	26.6		ug/m3		85	70 - 130
Carbon disulfide	31	33.7		ug/m3		108	70 - 130
Carbon tetrachloride	63	77.8		ug/m3		124	70 - 130
Chlorobenzene	49	46.1		ug/m3		94	70 - 130
Dibromochloromethane	98	105		ug/m3		107	70 - 130
Chloroethane	26	27.7		ug/m3		105	70 - 130
Chloroform	49	49.7		ug/m3		102	70 - 130
Chloromethane	21	21.5		ug/m3		104	70 - 130
1,2-Dibromoethane (EDB)	77	79.5		ug/m3		103	70 - 130
1,2-Dichlorobenzene	64	62.2		ug/m3		97	70 - 130
1,3-Dichlorobenzene	65	62.0		ug/m3		95	70 - 130
1,4-Dichlorobenzene	60	61.2		ug/m3		102	70 - 130
Dichlorodifluoromethane	49	53.2		ug/m3		108	70 - 130
1,1-Dichloroethane	40	41.3		ug/m3		102	70 - 130
1,2-Dichloroethane	40	45.9		ug/m3		114	70 - 130
1,1-Dichloroethene	40	40.4		ug/m3		102	70 - 130
cis-1,2-Dichloroethene	40	38.4		ug/m3		97	70 - 130
trans-1,2-Dichloroethene	40	39.7		ug/m3		100	70 - 130
1,2-Dichloropropane	46	49.4		ug/m3		107	70 - 130
cis-1,3-Dichloropropene	48	52.4		ug/m3		109	70 - 130
trans-1,3-Dichloropropene	45	44.8		ug/m3		99	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	70	83.1		ug/m3		119	70 - 130
Ethylbenzene	46	44.3		ug/m3		96	70 - 130
4-Ethyltoluene	49	43.0		ug/m3		87	70 - 130
Hexachlorobutadiene	110	128		ug/m3		120	70 - 130
2-Hexanone	41	39.9		ug/m3		97	70 - 130
Methylene chloride	35	33.0		ug/m3		95	70 - 130
4-Methyl-2-pentanone (MIBK)	45	42.9		ug/m3		95	70 - 130
Styrene	46	45.4		ug/m3		100	70 - 130
1,1,2,2-Tetrachloroethane	74	73.7		ug/m3		99	70 - 130
Tetrachloroethene	68	69.5		ug/m3		103	70 - 130
Toluene	38	39.3		ug/m3		104	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-1873/3
Matrix: Air
Analysis Batch: 1873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	74	82.3		ug/m3		111	70 - 130
1,1,1-Trichloroethane	55	56.7		ug/m3		104	70 - 130
1,1,2-Trichloroethane	55	57.7		ug/m3		106	70 - 130
Trichloroethene	54	57.1		ug/m3		106	70 - 130
Trichlorofluoromethane	56	61.2		ug/m3		109	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	77	76.6		ug/m3		100	70 - 130
1,2,4-Trimethylbenzene	49	48.6		ug/m3		99	70 - 130
1,3,5-Trimethylbenzene	53	48.5		ug/m3		92	70 - 130
Vinyl acetate	38	36.6		ug/m3		96	70 - 130
Vinyl chloride	26	28.4		ug/m3		111	70 - 130
m,p-Xylene	87	91.4		ug/m3		105	70 - 130
o-Xylene	47	43.9		ug/m3		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 340-1873/4
Matrix: Air
Analysis Batch: 1873

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	10.0	10.3		ppb v/v		103	70 - 130	2	25
Benzene	10.0	10.7		ppb v/v		107	70 - 130	3	25
Benzyl chloride	10.8	11.6		ppb v/v		108	70 - 130	3	25
Bromodichloromethane	10.0	12.5		ppb v/v		125	70 - 130	3	25
Bromoform	10.0	14.3	*	ppb v/v		143	70 - 130	4	25
Bromomethane	10.0	11.3		ppb v/v		113	70 - 130	5	25
2-Butanone (MEK)	10.6	9.39		ppb v/v		89	70 - 130	4	25
Carbon disulfide	10.0	11.3		ppb v/v		113	70 - 130	4	25
Carbon tetrachloride	10.0	12.7		ppb v/v		127	70 - 130	3	25
Chlorobenzene	10.7	10.4		ppb v/v		97	70 - 130	3	25
Dibromochloromethane	11.5	12.6		ppb v/v		110	70 - 130	3	25
Chloroethane	10.0	11.1		ppb v/v		111	70 - 130	5	25
Chloroform	10.0	10.6		ppb v/v		106	70 - 130	4	25
Chloromethane	10.0	11.1		ppb v/v		111	70 - 130	7	25
1,2-Dibromoethane (EDB)	10.0	10.6		ppb v/v		106	70 - 130	3	25
1,2-Dichlorobenzene	10.7	10.7		ppb v/v		100	70 - 130	3	25
1,3-Dichlorobenzene	10.8	10.7		ppb v/v		99	70 - 130	4	25
1,4-Dichlorobenzene	10.0	10.6		ppb v/v		106	70 - 130	4	25
Dichlorodifluoromethane	10.0	11.3		ppb v/v		113	70 - 130	5	25
1,1-Dichloroethane	10.0	10.6		ppb v/v		106	70 - 130	4	25
1,2-Dichloroethane	10.0	11.6		ppb v/v		116	70 - 130	3	25
1,1-Dichloroethene	10.0	10.6		ppb v/v		106	70 - 130	4	25
cis-1,2-Dichloroethene	10.0	10.1		ppb v/v		101	70 - 130	4	25
trans-1,2-Dichloroethene	10.0	10.4		ppb v/v		104	70 - 130	4	25
1,2-Dichloropropane	10.0	11.0		ppb v/v		110	70 - 130	3	25
cis-1,3-Dichloropropene	10.6	11.9		ppb v/v		112	70 - 130	3	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-1873/4
Matrix: Air
Analysis Batch: 1873

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	10.0	9.94		ppb v/v		99	70 - 130	1	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	12.7		ppb v/v		127	70 - 130	7	25
Ethylbenzene	10.6	10.5		ppb v/v		99	70 - 130	3	25
4-Ethyltoluene	10.0	9.18		ppb v/v		92	70 - 130	5	25
Hexachlorobutadiene	10.0	12.5		ppb v/v		125	70 - 130	4	25
2-Hexanone	10.0	10.1		ppb v/v		101	70 - 130	4	25
Methylene chloride	10.0	9.86		ppb v/v		99	70 - 130	4	25
4-Methyl-2-pentanone (MIBK)	11.0	10.8		ppb v/v		98	70 - 130	3	25
Styrene	10.7	11.0		ppb v/v		102	70 - 130	3	25
1,1,2,2-Tetrachloroethane	10.8	11.0		ppb v/v		102	70 - 130	3	25
Tetrachloroethene	10.0	10.6		ppb v/v		106	70 - 130	3	25
Toluene	10.0	10.7		ppb v/v		107	70 - 130	2	25
1,2,4-Trichlorobenzene	10.0	11.6		ppb v/v		116	70 - 130	5	25
1,1,1-Trichloroethane	10.0	10.8		ppb v/v		108	70 - 130	4	25
1,1,2-Trichloroethane	10.0	10.8		ppb v/v		108	70 - 130	2	25
Trichloroethene	10.0	11.0		ppb v/v		110	70 - 130	3	25
Trichlorofluoromethane	10.0	11.4		ppb v/v		114	70 - 130	4	25
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.5		ppb v/v		105	70 - 130	5	25
1,2,4-Trimethylbenzene	10.0	10.2		ppb v/v		102	70 - 130	3	25
1,3,5-Trimethylbenzene	10.7	10.0		ppb v/v		94	70 - 130	2	25
Vinyl acetate	10.8	10.8		ppb v/v		100	70 - 130	4	25
Vinyl chloride	10.0	11.9		ppb v/v		119	70 - 130	7	25
m,p-Xylene	20.0	21.7		ppb v/v		108	70 - 130	3	25
o-Xylene	10.8	10.4		ppb v/v		96	70 - 130	2	25

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	24	24.5		ug/m3		103	70 - 130	2	25
Benzene	32	34.2		ug/m3		107	70 - 130	3	25
Benzyl chloride	56	60.3		ug/m3		108	70 - 130	3	25
Bromodichloromethane	67	83.6		ug/m3		125	70 - 130	3	25
Bromoform	100	147	*	ug/m3		143	70 - 130	4	25
Bromomethane	39	43.7		ug/m3		113	70 - 130	5	25
2-Butanone (MEK)	31	27.7		ug/m3		89	70 - 130	4	25
Carbon disulfide	31	35.2		ug/m3		113	70 - 130	4	25
Carbon tetrachloride	63	79.9		ug/m3		127	70 - 130	3	25
Chlorobenzene	49	47.5		ug/m3		97	70 - 130	3	25
Dibromochloromethane	98	108		ug/m3		110	70 - 130	3	25
Chloroethane	26	29.3		ug/m3		111	70 - 130	5	25
Chloroform	49	51.8		ug/m3		106	70 - 130	4	25
Chloromethane	21	22.9		ug/m3		111	70 - 130	7	25
1,2-Dibromoethane (EDB)	77	81.6		ug/m3		106	70 - 130	3	25
1,2-Dichlorobenzene	64	64.4		ug/m3		100	70 - 130	3	25
1,3-Dichlorobenzene	65	64.3		ug/m3		99	70 - 130	4	25
1,4-Dichlorobenzene	60	63.7		ug/m3		106	70 - 130	4	25
Dichlorodifluoromethane	49	55.7		ug/m3		113	70 - 130	5	25
1,1-Dichloroethane	40	42.8		ug/m3		106	70 - 130	4	25
1,2-Dichloroethane	40	47.1		ug/m3		116	70 - 130	3	25
1,1-Dichloroethene	40	42.2		ug/m3		106	70 - 130	4	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-1873/4
Matrix: Air
Analysis Batch: 1873

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	40	39.9		ug/m3		101	70 - 130	4	25
trans-1,2-Dichloroethene	40	41.3		ug/m3		104	70 - 130	4	25
1,2-Dichloropropane	46	50.7		ug/m3		110	70 - 130	3	25
cis-1,3-Dichloropropene	48	53.9		ug/m3		112	70 - 130	3	25
trans-1,3-Dichloropropene	45	45.1		ug/m3		99	70 - 130	1	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	70	88.9		ug/m3		127	70 - 130	7	25
Ethylbenzene	46	45.5		ug/m3		99	70 - 130	3	25
4-Ethyltoluene	49	45.1		ug/m3		92	70 - 130	5	25
Hexachlorobutadiene	110	133		ug/m3		125	70 - 130	4	25
2-Hexanone	41	41.3		ug/m3		101	70 - 130	4	25
Methylene chloride	35	34.3		ug/m3		99	70 - 130	4	25
4-Methyl-2-pentanone (MIBK)	45	44.4		ug/m3		98	70 - 130	3	25
Styrene	46	46.7		ug/m3		102	70 - 130	3	25
1,1,2,2-Tetrachloroethane	74	75.7		ug/m3		102	70 - 130	3	25
Tetrachloroethene	68	71.9		ug/m3		106	70 - 130	3	25
Toluene	38	40.2		ug/m3		107	70 - 130	2	25
1,2,4-Trichlorobenzene	74	86.2		ug/m3		116	70 - 130	5	25
1,1,1-Trichloroethane	55	58.8		ug/m3		108	70 - 130	4	25
1,1,2-Trichloroethane	55	59.1		ug/m3		108	70 - 130	2	25
Trichloroethene	54	59.1		ug/m3		110	70 - 130	3	25
Trichlorofluoromethane	56	63.9		ug/m3		114	70 - 130	4	25
1,1,2-Trichloro-1,2,2-trifluoroethane	77	80.2		ug/m3		105	70 - 130	5	25
1,2,4-Trimethylbenzene	49	50.2		ug/m3		102	70 - 130	3	25
1,3,5-Trimethylbenzene	53	49.3		ug/m3		94	70 - 130	2	25
Vinyl acetate	38	38.2		ug/m3		100	70 - 130	4	25
Vinyl chloride	26	30.4		ug/m3		119	70 - 130	7	25
m,p-Xylene	87	94.0		ug/m3		108	70 - 130	3	25
o-Xylene	47	45.1		ug/m3		96	70 - 130	2	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

GC VOA

Analysis Batch: 1805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
340-2373-1	SGMP-02-20120606	Total/NA	Air	D1946	
340-2373-2	SGMP-03-20120606	Total/NA	Air	D1946	
340-2373-3	SGMP-04-20120606	Total/NA	Air	D1946	
340-2373-4	SGMP-05-20120606	Total/NA	Air	D1946	
340-2373-5	SGMP-06-20120606	Total/NA	Air	D1946	
340-2373-6	SGMP-07-20120606	Total/NA	Air	D1946	
340-2373-7	SGMP-08-20120606	Total/NA	Air	D1946	
340-2373-8	SGMP-09-20120607	Total/NA	Air	D1946	
340-2373-9	SGMP-01-20120607	Total/NA	Air	D1946	
340-2373-10	TB-20120607	Total/NA	Air	D1946	
340-2373-11	SGMP-10-20120607	Total/NA	Air	D1946	
340-2373-12	SGMP-100-20120607	Total/NA	Air	D1946	
LCS 340-1805/4	Lab Control Sample	Total/NA	Air	D1946	
LCS 340-1805/6	Lab Control Sample	Total/NA	Air	D1946	
LCS 340-1805/9	Lab Control Sample	Total/NA	Air	D1946	
LCSD 340-1805/10	Lab Control Sample Dup	Total/NA	Air	D1946	
LCSD 340-1805/5	Lab Control Sample Dup	Total/NA	Air	D1946	
LCSD 340-1805/7	Lab Control Sample Dup	Total/NA	Air	D1946	
MB 340-1805/11	Method Blank	Total/NA	Air	D1946	
MB 340-1805/8	Method Blank	Total/NA	Air	D1946	

Analysis Batch: 1861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
340-2373-13	SGMP-11-20120607	Total/NA	Air	D1946	
340-2373-14	SGMP-12-20120607	Total/NA	Air	D1946	
LCS 340-1861/4	Lab Control Sample	Total/NA	Air	D1946	
LCS 340-1861/6	Lab Control Sample	Total/NA	Air	D1946	
LCS 340-1861/9	Lab Control Sample	Total/NA	Air	D1946	
LCSD 340-1861/10	Lab Control Sample Dup	Total/NA	Air	D1946	
LCSD 340-1861/5	Lab Control Sample Dup	Total/NA	Air	D1946	
LCSD 340-1861/7	Lab Control Sample Dup	Total/NA	Air	D1946	
MB 340-1861/11	Method Blank	Total/NA	Air	D1946	
MB 340-1861/8	Method Blank	Total/NA	Air	D1946	

Air - GC/MS VOA

Analysis Batch: 1854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
340-2373-1	SGMP-02-20120606	Total/NA	Air	TO-15	
340-2373-2	SGMP-03-20120606	Total/NA	Air	TO-15	
340-2373-3	SGMP-04-20120606	Total/NA	Air	TO-15	
340-2373-4	SGMP-05-20120606	Total/NA	Air	TO-15	
LCS 340-1854/1000	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 340-1854/15	Lab Control Sample Dup	Total/NA	Air	TO-15	
MB 340-1854/16	Method Blank	Total/NA	Air	TO-15	

Analysis Batch: 1863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
340-2373-1	SGMP-02-20120606	Total/NA	Air	TO-15	
340-2373-3	SGMP-04-20120606	Total/NA	Air	TO-15	
340-2373-4	SGMP-05-20120606	Total/NA	Air	TO-15	
340-2373-5	SGMP-06-20120606	Total/NA	Air	TO-15	

Air - GC/MS VOA (Continued)

Analysis Batch: 1863 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
340-2373-6	SGMP-07-20120606	Total/NA	Air	TO-15	
340-2373-7	SGMP-08-20120606	Total/NA	Air	TO-15	
340-2373-8	SGMP-09-20120607	Total/NA	Air	TO-15	
340-2373-9	SGMP-01-20120607	Total/NA	Air	TO-15	
340-2373-11	SGMP-10-20120607	Total/NA	Air	TO-15	
340-2373-12	SGMP-100-20120607	Total/NA	Air	TO-15	
340-2373-14	SGMP-12-20120607	Total/NA	Air	TO-15	
LCS 340-1863/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 340-1863/4	Lab Control Sample Dup	Total/NA	Air	TO-15	
MB 340-1863/5	Method Blank	Total/NA	Air	TO-15	

Analysis Batch: 1873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
340-2373-8	SGMP-09-20120607	Total/NA	Air	TO-15	
340-2373-10	TB-20120607	Total/NA	Air	TO-15	
340-2373-13	SGMP-11-20120607	Total/NA	Air	TO-15	
LCS 340-1873/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 340-1873/4	Lab Control Sample Dup	Total/NA	Air	TO-15	
MB 340-1873/5	Method Blank	Total/NA	Air	TO-15	

Client Sample ID: SGMP-02-20120606

Lab Sample ID: 340-2373-1

Date Collected: 06/06/12 09:47

Matrix: Air

Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		1.99	1805	06/12/12 16:08	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		1	1854	06/19/12 04:37	DLK	TAL LA
	Instrument ID: MSG							
Total/NA	Analysis	TO-15		2.47	1863	06/19/12 16:16	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SGMP-03-20120606

Lab Sample ID: 340-2373-2

Date Collected: 06/06/12 11:30

Matrix: Air

Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		1.92	1805	06/12/12 16:26	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		24	1854	06/19/12 05:18	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SGMP-04-20120606

Lab Sample ID: 340-2373-3

Date Collected: 06/06/12 12:09

Matrix: Air

Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.03	1805	06/12/12 16:45	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		1	1854	06/19/12 06:13	DLK	TAL LA
	Instrument ID: MSG							
Total/NA	Analysis	TO-15		5.77	1863	06/19/12 17:03	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SGMP-05-20120606

Lab Sample ID: 340-2373-4

Date Collected: 06/06/12 13:13

Matrix: Air

Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.03	1805	06/12/12 17:06	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		1	1854	06/19/12 07:00	DLK	TAL LA
	Instrument ID: MSG							
Total/NA	Analysis	TO-15		2.61	1863	06/19/12 17:49	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SGMP-06-20120606 — **Lab Sample ID: 340-2373-5**
Date Collected: 06/06/12 13:50 — **Matrix: Air**
Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.13	1805	06/12/12 17:24	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		267	1863	06/19/12 18:30	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SGMP-07-20120606 — **Lab Sample ID: 340-2373-6**
Date Collected: 06/06/12 14:49 — **Matrix: Air**
Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		1.98	1805	06/12/12 17:49	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		2390	1863	06/19/12 15:28	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SGMP-08-20120606 — **Lab Sample ID: 340-2373-7**
Date Collected: 06/06/12 15:27 — **Matrix: Air**
Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.06	1805	06/12/12 18:12	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		74	1863	06/19/12 19:14	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SGMP-09-20120607 — **Lab Sample ID: 340-2373-8**
Date Collected: 06/07/12 11:16 — **Matrix: Air**
Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.06	1805	06/12/12 18:30	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		1	1863	06/19/12 20:04	DLK	TAL LA
	Instrument ID: MSG							
Total/NA	Analysis	TO-15		5.67	1873	06/20/12 15:12	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SGMP-01-20120607 — **Lab Sample ID: 340-2373-9**
Date Collected: 06/07/12 11:49 — **Matrix: Air**
Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		1.95	1805	06/12/12 18:51	EI	TAL LA
	Instrument ID: GC8							

Client Sample ID: SGMP-01-20120607 — **Lab Sample ID: 340-2373-9**
Date Collected: 06/07/12 11:49 — **Matrix: Air**
Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	1863	06/19/12 20:51	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: TB-20120607 — **Lab Sample ID: 340-2373-10**
Date Collected: 06/07/12 08:00 — **Matrix: Air**
Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		1	1805	06/12/12 19:10	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		1	1873	06/20/12 14:29	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SGMP-10-20120607 — **Lab Sample ID: 340-2373-11**
Date Collected: 06/07/12 09:10 — **Matrix: Air**
Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.01	1805	06/12/12 19:29	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		2.52	1863	06/19/12 22:19	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SGMP-100-20120607 — **Lab Sample ID: 340-2373-12**
Date Collected: 06/07/12 09:11 — **Matrix: Air**
Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.09	1805	06/12/12 19:46	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		2.61	1863	06/19/12 23:03	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SGMP-11-20120607 — **Lab Sample ID: 340-2373-13**
Date Collected: 06/07/12 09:51 — **Matrix: Air**
Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.1	1861	06/18/12 15:16	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		2.21	1873	06/20/12 16:00	DLK	TAL LA
	Instrument ID: MSG							

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Client Sample ID: SGMP-12-20120607
Date Collected: 06/07/12 10:25
Date Received: 06/09/12 09:00

Lab Sample ID: 340-2373-14
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		1.79	1861	06/18/12 15:33	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		5.58	1863	06/20/12 00:44	DLK	TAL LA
	Instrument ID: MSG							

Laboratory References:

TAL LA = TestAmerica Costa Mesa, 3585 Cadillac Ave, Suite A, Costa Mesa, CA 92626, TEL (714)258-8610

Certification Summary

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Costa Mesa	Arizona	State Program	9	AZ0727
TestAmerica Costa Mesa	L-A-B	DoD ELAP		L2273
TestAmerica Costa Mesa	New York	NELAC	2	11851
TestAmerica Costa Mesa	Oregon	NELAC	10	CA200013
TestAmerica Costa Mesa	Washington	State Program	10	C579

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Method	Method Description	Protocol	Laboratory
D1946	Fixed Gases in Air (GC)	ASTM	TAL LA
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL LA

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

Laboratory References:

TAL LA = TestAmerica Costa Mesa, 3585 Cadillac Ave, Suite A, Costa Mesa, CA 92626, TEL (714)258-8610

Sample Summary

Client: CDM Smith, Inc.
Project/Site: Sherwin Williams

TestAmerica Job ID: 340-2373-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
340-2373-1	SGMP-02-20120606	Air	06/06/12 09:47	06/09/12 09:00
340-2373-2	SGMP-03-20120606	Air	06/06/12 11:30	06/09/12 09:00
340-2373-3	SGMP-04-20120606	Air	06/06/12 12:09	06/09/12 09:00
340-2373-4	SGMP-05-20120606	Air	06/06/12 13:13	06/09/12 09:00
340-2373-5	SGMP-06-20120606	Air	06/06/12 13:50	06/09/12 09:00
340-2373-6	SGMP-07-20120606	Air	06/06/12 14:49	06/09/12 09:00
340-2373-7	SGMP-08-20120606	Air	06/06/12 15:27	06/09/12 09:00
340-2373-8	SGMP-09-20120607	Air	06/07/12 11:16	06/09/12 09:00
340-2373-9	SGMP-01-20120607	Air	06/07/12 11:49	06/09/12 09:00
340-2373-10	TB-20120607	Air	06/07/12 08:00	06/09/12 09:00
340-2373-11	SGMP-10-20120607	Air	06/07/12 09:10	06/09/12 09:00
340-2373-12	SGMP-100-20120607	Air	06/07/12 09:11	06/09/12 09:00
340-2373-13	SGMP-11-20120607	Air	06/07/12 09:51	06/09/12 09:00
340-2373-14	SGMP-12-20120607	Air	06/07/12 10:25	06/09/12 09:00

TestAmerica
3585 Cadillac Ave., Suite A
Costa Mesa, CA 92626
Phone 714-258-8610 Fax 714-258-0921

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information	Project Manager: Pawan Sharma	340-2373	1 of 3 COCs
Company: CDM Smith	Phone: 925 933 2900	Samples Collected By: S. Mysel	
Address: 100 Pringle Ave, Suite 300	Email: SharmapK@cdmsmith.com		
City/State/Zip: Walnut Creek, CA 94596	Site Contact: Pawan Sharma		
Phone: 925 933 2900	LAB Contact: Beth Riley		
FAX:	Analysis Turnaround Time		
Project Name: Sherwin Williams	Standard (Specify) 14 days		
Site: Emeryville, CA	Rush (Specify)		
PO # 13452-92207-TK29.SG1			

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, 'Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	TO-3	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
SGMP-02-20120606	06/06/2012	0947	1024	-30	-5	HF204	34000988	X					X					Y		
SGMP-03-20120606		1130	1150	-30	-5	HF074	34001074	X					X					Y		
SGMP-04-20120606		1209	1230	-28	-5	HF203	34000626	X					X					Y		
SGMP-05-20120606		1313	1334	-30	-5	HF238	34000646	X					X					Y		

Temperature (Fahrenheit)	Interior	Ambient	
Start			
Stop			

Pressure (inches of Hg)	Interior	Ambient	
Start			
Stop			

Special Instructions/QC Requirements & Comments:

ASTM D-1946 Special Report helium, Oxygen, Carbon dioxide, methane

Samples Shipped by: S. Mysel	Date/Time: 06/08/2012 0900	Samples Received by:
Samples Relinquished by: S. Mysel	Date/Time: 06/08/2012 0900	Received by:
Relinquished by:	Date/Time: 6/9/12 0900	Received by:

Lab Use Only Shipper Name: Opened by: Condition:

TAL-8604-340(0312)

TestAmerica
3585 Cadillac Ave., Suite A
Costa Mesa, CA 92626
Phone 714-258-8610 Fax 714-258-0921

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information	Project Manager: Pawan Sharma 340-2373	2 of 3 COCs
Company: CDM Smith	Phone: 9259332900	Samples Collected By: S. Mysel
Address: 100 Pringle Ave, Suite 300	Email: Sharmapk@cdmsmith.com	
City/State/Zip: Walnut Creek, CA 94596	Site Contact: Pawan Sharma	
Phone: 9259332900	LAB Contact: Beth Riley	
FAX:	Analysis Turnaround Time	
Project Name: Sherwin Williams	Standard (Specify) 14 days	
Site: Emeryville, CA	Rush (Specify)	
PO # 134529220 T-TK29.SG1		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	TO-3	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)	
SGMP-06-20120606	06/06/2012	1350	1435	-30	-7	HF236	34000093	X					X					X			
SGMP-07-20120606	"	1449	1517	-30	-5	HF088	34000041	X					X					X			
SGMP-08-20120606	"	1527	1552	-30	-5	HF115	34000956	X					X					X			
SGMP-09-20120607	06/07/2012	1116	1137	-30	-5	HF083	34000636	X					X					X			
SGMP-01-20120607	"	1149	1211	-30	-5	HF225	34000333	X					X					X			
TB-20120607		0800				HF142	34000912	X					X							X	Trip Blank

Temperature (Fahrenheit)	Interior	Ambient	
Start			
Stop			

Pressure (inches of Hg)	Interior	Ambient	
Start			
Stop			

Special Instructions/QC Requirements & Comments:
ASTM D-1946 Special Report helium, oxygen, carbon dioxide, methane

Samples Shipped by: Steve Mysel	Date/Time: 06/08/2012 0900	Samples Received by:
Samples Relinquished by: Steve Mysel	Date/Time: 06/08/2012 0900	Received by:
Relinquished by:	Date/Time: 6/9/12 0900	Received by:

Lab Use Only Shipper Name: Opened by: Condition:

TAL-8604-340(0312)

TestAmerica
3585 Cadillac Ave., Suite A
Costa Mesa, CA 92626
Phone 714-258-8610 Fax 714-258-0921

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information	Project Manager: Pawan Sharma	340-2373	3 of 3 COCs
Company: CDM Smith	Phone: 9259332900	Samples Collected By: S. Mysel	
Address: 100 Pringle Ave, Suite 300	Email: SharmaPK@cdmsmith.com		
City/State/Zip: Walnut Creek, CA 94596	Site Contact: Pawan Sharma		
Phone: 9259332900	LAB Contact: Beth Riley		
FAX:	Analysis Turnaround Time		
Project Name: Sherwin Williams	Standard (Specify) 14 days		
Site: Emeryville, CA	Rush (Specify)		
PO # 13452-92207-1K29.SGI			

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	TO-3	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
SGMP-10-20120607	06/07/2012	0910	0940	-26	-5	HF033	340096023	X					X					X		
SGMP-100-20120607	"	0911	0934	-30	-5	HF044	340911 5	X					X					X		
SGMP-11-20120607	"	0951	1010	-28	-5	HF015	340096025	X					X					X		
SGMP-12-20120607	"	1025	1050	-30	-5	HF044	340096040	X					X					X		

Temperature (Fahrenheit)		
	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)		
	Interior	Ambient
Start		
Stop		

Special Instructions/QC Requirements & Comments:

ASTM D-1946 Special Report helium, oxygen, carbon dioxide, methane

Samples Shipped by: S. Mysel	Date/Time: 06/08/2012 0900	Samples Received by:
Samples Relinquished by: S. Mysel	Date/Time: 06/08/2012 0900	Received by:
Relinquished by:	Date/Time: 6/9/12 0900	Received by:

Lab Use Only Shipper Name: Opened by: Condition:

TAL-8604-340(0312)

Page 95 of 150

7/2/2012

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 340-2373-1

Login Number: 2373

List Source: TestAmerica Costa Mesa

List Number: 1

Creator: Gonzales, Steve

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 340000988

DATE CLEANED: 340-1915

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: HF074

Duration of comp. : — .Hrs. / mins.

Flow setting: ~50 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA (circle unit used))	12.43	6-11-2012	MD
FINAL PRESSURE (PSIA)	24.79	6-11-2012	MD

Pressurization Gas: N2

COMMENTS: Repressurized 06-12-12 to 1028
12.65/25.03

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

2

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 34001074

DATE CLEANED: 340-2164

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: HF203

Duration of comp. : — Hrs. / mins.

Flow setting: ~50 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA (circle unit used))	12.91	6-11-2012	AD
FINAL PRESSURE (PSIA)	24.78	6-11-2012	AD

Pressurization Gas: N2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 340006266

DATE CLEANED: 340-1966

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: HF204

Duration of comp. : — Hrs. / mins.

Flow setting: ~50 ml/min

Initials:

READING	TIME	Vac. (Inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / ~~PSIA~~ (circle unit used))	11.91	6-11-2012	AD
.FINAL PRESSURE (PSIA)	24.20	6-11-2012	AD

Pressurization Gas: N2

COMMENTS: Repressurized on ocean on 1082
11.04/25.08

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

N:\CORDOCS\TestAmerica DOCs\TestAmerica - CANISTER FIELD DATA RECORD - 20080201.doc

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM ✓
CANISTER SERIAL #: 340006646
DATE CLEANED: 340-2164
CLIENT SAMPLE #:
SITE LOCATION:

VFR ID: HF238
Duration of comp. : — Hrs. / mins.
Flow setting: ~50 ml/min
Initials: [illegible]

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	5/25/12	[illegible]
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA (circle unit used))	12.19	6-11-2012	AD
FINAL PRESSURE (PSIA)	24.73	6-11-2012	AD

Pressurization Gas: ____

COMMENTS: Reviewed by 06/19/12 1035
1/17/27.14

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

N:\CO\DOCS\TestAmerica DOCs\TestAmerica - CANISTER FIELD DATA RECORD - 20080201.doc

5

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 340O1093

DATE CLEANED: 340-1915

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: HF083

Duration of comp. : — Hrs. / mins.

Flow setting: ~50 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA (circle unit used))	11.83	6-11-2012	AD
FINAL PRESSURE (PSIA)	25.24	6-11-2012	AD

Pressurization Gas: N2

COMMENTS: ~~Repressurized on 06/19/12 1035~~
Using sample on 06-18-12 ~~13:17/2:14~~
Pressure Nbhtrm 06/19/12 on 1114 2:25/28.16

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

N:\CORDOCS\TestAmerica DOCs\TestAmerica - CANISTER FIELD DATA RECORD - 20080201.doc

6

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 340000641

DATE CLEANED: 340-2164

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: HF115

Duration of comp. : — Hrs. / mins.

Flow setting: ~50 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA (circle unit used))	12.68	6-11-2012	AD
FINAL PRESSURE (PSIA)	25.10	6-11-2012	AD

Pressurization Gas: N2

COMMENTS: Pressure Reduction 06-19-12 @ 1119
1.96/27.02
06-19-12 @ 1236
29.6/25.93

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

N:\CO\DOCS\TestAmerica DOCs\TestAmerica - CANISTER FIELD DATA RECORD - 20080201.doc

7

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 340000956

DATE CLEANED: 340-1890

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: HF088

Duration of comp. : — Hrs. / mins.

Flow setting: ~50 ml/min

Initials:

READING	TIME	Vac. (Inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA) (circle unit used))	12.20	6-11-2012	HD
.FINAL PRESSURE (PSIA)	25.13	6-11-2012	HD

Pressurization Gas: N_2

COMMENTS: Pressure Reduction 06/29/12 via 1119
9.51/25.91

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

N:\CORDOCS\TestAmerica DOCs\TestAmerica - CANISTER FIELD DATA RECORD - 20080201.doc

8

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 340006360

DATE CLEANED: 340-1966

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: HF033

Duration of comp. : — Hrs. / mins.

Flow setting: ~50 ml/min

Initials:

READING	TIME	Vac. (Inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg (PSIA) (circle unit used))	12.22	6-11-2012	MD
FINAL PRESSURE (PSIA)	25.15	6-11-2012	MD

Pressurization Gas: N2

COMMENTS: Repressurized on 06-2012 10:00
12.16/26.80

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

N:\COI\DOCS\TestAmerica DOCs\TestAmerica - CANISTER FIELD DATA RECORD - 20080201.doc

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 34000335

DATE CLEANED: 340-1892

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: HF225

Duration of comp. : — Hrs. / mins.

Flow setting: ~50 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg (PSIA) circle unit used))	12.97	6-11-2012	AD
FINAL PRESSURE (PSIA)	25.29	6-11-2012	AD

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM
CANISTER SERIAL #: 340000912
DATE CLEANED: 340-1892
CLIENT SAMPLE #:
SITE LOCATION:

VFR ID: HF231
Duration of comp. : — Hrs. / mins.
Flow setting: ~50 ml/min
Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg (PSIA) (circle unit used))	0.14	6-11-2012	AD
FINAL PRESSURE (PSIA)	24.58	6-11-2012	AD

Pressurization Gas: N2

COMMENTS: TB

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

N:\COI\DOCS\TestAmerica DOCs\TestAmerica - CANISTER FIELD DATA RECORD - 20080201.doc

TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 340006235

DATE CLEANED: 340-1892

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: HF064

Duration of comp. : — Hrs. / mins.

Flow setting: ~50 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg (PSIA) (circle unit used))	12.34	6-11-2012	MM
FINAL PRESSURE (PSIA)	24.86	6-11-2012	MM

Pressurization Gas: N2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

N:\CORDOCS\TestAmerica DOCs\TestAmerica - CANISTER FIELD DATA RECORD - 20080201.doc

12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 34001115

DATE CLEANED: 340-1906

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: HF236

Duration of comp. : — Hrs. / mins.

Flow setting: ~50 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA (circle unit used))	12.21	6-11-2012	AD
FINAL PRESSURE (PSIA)	25.50	6-11-2012	AD

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

N:\CO\DOCS\TestAmerica DOCs\TestAmerica - CANISTER FIELD DATA RECORD - 20080201.doc

13

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 340000625

DATE CLEANED: 340-1892

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: HF044

Duration of comp. : — Hrs. / mins.

Flow setting: ~50 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA (circle unit used))	12.13	6-11-2012	AD
FINAL PRESSURE (PSIA)	25.48	6-11-2012	AD

Pressurization Gas: N_2

COMMENTS: Repressurized on 06-20 12 1120
12.10/23.95

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

N:\CORDOCS\TestAmerica DOCs\TestAmerica - CANISTER FIELD DATA RECORD - 20080201.doc

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 340000640

DATE CLEANED: 340-1892

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: HF015

Duration of comp. : — Hrs. / mins.

Flow setting: ~50 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA (circle unit used))	12.68	6-11-2012	AD
FINAL PRESSURE (PSIA)	22.65	6-11-2012	AD

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

N:\COI\DOCS\TestAmerica DOCs\TestAmerica - CANISTER FIELD DATA RECORD - 20080201.doc

X2

CANISTER QC CERTIFICATION

TestAmerica

Certification Type: TO-15

Date Cleaned/Batch: C050712C 340-1890

Date of QC: 05-11-12

Data File Number: LW05118 (MSG)

CANISTER ID NUMBERS

*340000676	34001032
0324	0667
0327	0682
0958	0762
1133	0732
0332	0956

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

Reviewed By: _____ Date: 05-12-12

N:\Sample Control\DOCs\Can QC Cert - Generic - 20110804.doc

CANISTER QC CERTIFICATION

TestAmerica

Certification Type: TO-15

Date Cleaned/Batch: D050712D 340-1892

Date of QC: 05-09-12

Data File Number: MV050912(MSC)

CANISTER ID NUMBERS

*3400 1121	3400 0625
1184	0237
0755	0673
0912	0987
0638	0335
0328	0640

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

Reviewed By: _____ Date: 05-09-12

N:\Sample Control\DQCs\Can QC Cert - Generic - 20110804.doc

CANISTER QC CERTIFICATION

TestAmerica

Certification Type: TO-15

Date Cleaned/Batch: D050912B 340-1906

Date of QC: 05-10-12

Data File Number: LB050914 (MS4)

CANISTER ID NUMBERS

*34000868	34001065
1070	1064
0858	1117
1068	0604
1114	0900
~~0777~~ 1115 6/15/12	0316

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

Reviewed By: _____

Date: 05-10-12

N:\Sample Control\DOCs\Can QC Cert - Generic - 20110804.doc

X2

CANISTER QC CERTIFICATION

TestAmerica

Certification Type: TO-15

Date Cleaned/Batch: D050912D 3/10-1915

Date of QC: 05-24-12

Data File Number: lw30524-12 (lw52)

CANISTER ID NUMBERS

* 34091093	340008566
0988	0642
1027	1116
1002	0627
1011	0665
0999	0317

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

Reviewed By:

05-24-12
Date:

N:\Sample Control\DOCs\Can QC Cert - Generic - 20110804.doc

CANISTER QC CERTIFICATION

TestAmerica

Certification Type: TO-15

Date Cleaned/Batch: D054128 340-1966

Date of QC: 05-21-12

Data File Number: MB052117 (MS4)

CANISTER ID NUMBERS

*3400626	3400601
0636	0938
0768	0939
0620	0863
0624	0860
1120	1382

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

Reviewed By: [signature]

Date: 05-22-12

N:\Sample Control\DOCs\Can QC Cert - Generic - 20110804.doc

CANISTER QC CERTIFICATION

TestAmerica

Certification Type: TO-15 10% QC (1mL)

Date Cleaned/Batch: C052312A 340-2164

Date of QC: 05-25-12

Data File Number: lm052412m(MSC4)

CANISTER ID NUMBERS

*340006678	340009928
1075	0744
0330	0646
0687	0641
0910	1074
—	—

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

Reviewed By:

Date: 05-25-12

N:\Sample Control\DOCs\Can QC Cert - Generic - 20110804.doc

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1890-1

SDG No.:

Client Sample ID: 34000676 Lab Sample ID: 340-1890-1

Matrix: Air Lab File ID: MB05118.d

Analysis Method: TO-15 Date Collected: 05/07/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/11/2012 22:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1564 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.47	J	0.80	0.30
107-02-8	Acrolein	ND		4.0	2.0
107-13-1	Acrylonitrile	ND		2.0	0.50
107-05-1	Allyl chloride	ND		0.50	0.25
71-43-2	Benzene	ND		0.30	0.15
100-44-7	Benzyl chloride	ND		0.80	0.25
75-27-4	Bromodichloromethane	ND		0.30	0.15
75-25-2	Bromoform	ND		0.40	0.20
74-83-9	Bromomethane	ND		0.80	0.20
106-99-0	1,3-Butadiene	ND		0.80	0.40
106-97-8	n-Butane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		0.80	0.40
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.80
104-51-8	n-Butylbenzene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
98-06-6	tert-Butylbenzene	ND		0.80	0.40
75-15-0	Carbon disulfide	ND		0.80	0.20
56-23-5	Carbon tetrachloride	ND		0.80	0.25
75-00-3	Chloroethane	ND		0.80	0.20
108-90-7	Chlorobenzene	ND		0.30	0.10
75-45-6	Chlorodifluoromethane	ND		1.0	0.40
67-66-3	Chloroform	ND		0.30	0.10
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.50	0.25
110-82-7	Cyclohexane	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.40	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.20
74-95-3	Dibromomethane	ND		0.40	0.20
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroetha ne	ND		0.40	0.20
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.15
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.15
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.15
107-06-2	1,2-Dichloroethane	ND		0.80	0.30

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1890-1

SDG No.:

Client Sample ID: 34000676 Lab Sample ID: 340-1890-1

Matrix: Air Lab File ID: MB05118.d

Analysis Method: TO-15 Date Collected: 05/07/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/11/2012 22:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1564 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.20
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.20
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.20
78-87-5	1,2-Dichloropropane	ND		0.40	0.20
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.20
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.20
123-91-1	1,4-Dioxane	ND		0.80	0.40
141-78-6	Ethyl acetate	ND		0.30	0.15
100-41-4	Ethylbenzene	ND		0.40	0.15
622-96-8	4-Ethyltoluene	ND		0.40	0.20
142-82-5	n-Heptane	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		0.40	0.20
110-54-3	n-Hexane	ND		1.0	0.40
591-78-6	2-Hexanone	ND		0.40	0.25
98-82-8	Isopropylbenzene	ND		0.80	0.25
99-87-6	4-Isopropyltoluene	ND		0.80	0.25
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.30
80-62-6	Methyl methacrylate	ND		0.40	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20
75-09-2	Methylene chloride	ND		0.40	0.20
98-83-9	alpha-Methylstyrene	ND		0.40	0.15
91-20-3	Naphthalene	ND		2.0	0.80
111-65-9	n-Octane	ND		0.40	0.15
109-66-0	n-Pentane	ND		1.0	0.30
115-07-1	Propylene	ND		1.0	0.50
103-65-1	n-Propylbenzene	ND		0.50	0.20
100-42-5	Styrene	ND		0.40	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.10
127-18-4	Tetrachloroethene	ND		0.40	0.20
109-99-9	Tetrahydrofuran	ND		2.0	0.50
108-88-3	Toluene	ND		0.40	0.20
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.20
120-82-1	1,2,4-Trichlorobenzene	ND		2.5	1.0
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.15
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1890-1

SDG No.:

Client Sample ID: 34000676 Lab Sample ID: 340-1890-1

Matrix: Air Lab File ID: MB05118.d

Analysis Method: TO-15 Date Collected: 05/07/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/11/2012 22:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1564 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.20
75-69-4	Trichlorofluoromethane	ND		0.40	0.15
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.20
95-63-6	1,2,4-Trimethylbenzene	ND		2.5	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.25
540-84-1	2,2,4-Trimethylpentane	ND		0.50	0.20
108-05-4	Vinyl acetate	ND		0.80	0.20
593-60-2	Vinyl bromide	ND		0.40	0.20
75-01-4	Vinyl chloride	ND		0.20	0.10
179601-23-1	m,p-Xylene	ND		0.80	0.20
95-47-6	o-Xylene	ND		0.40	0.20

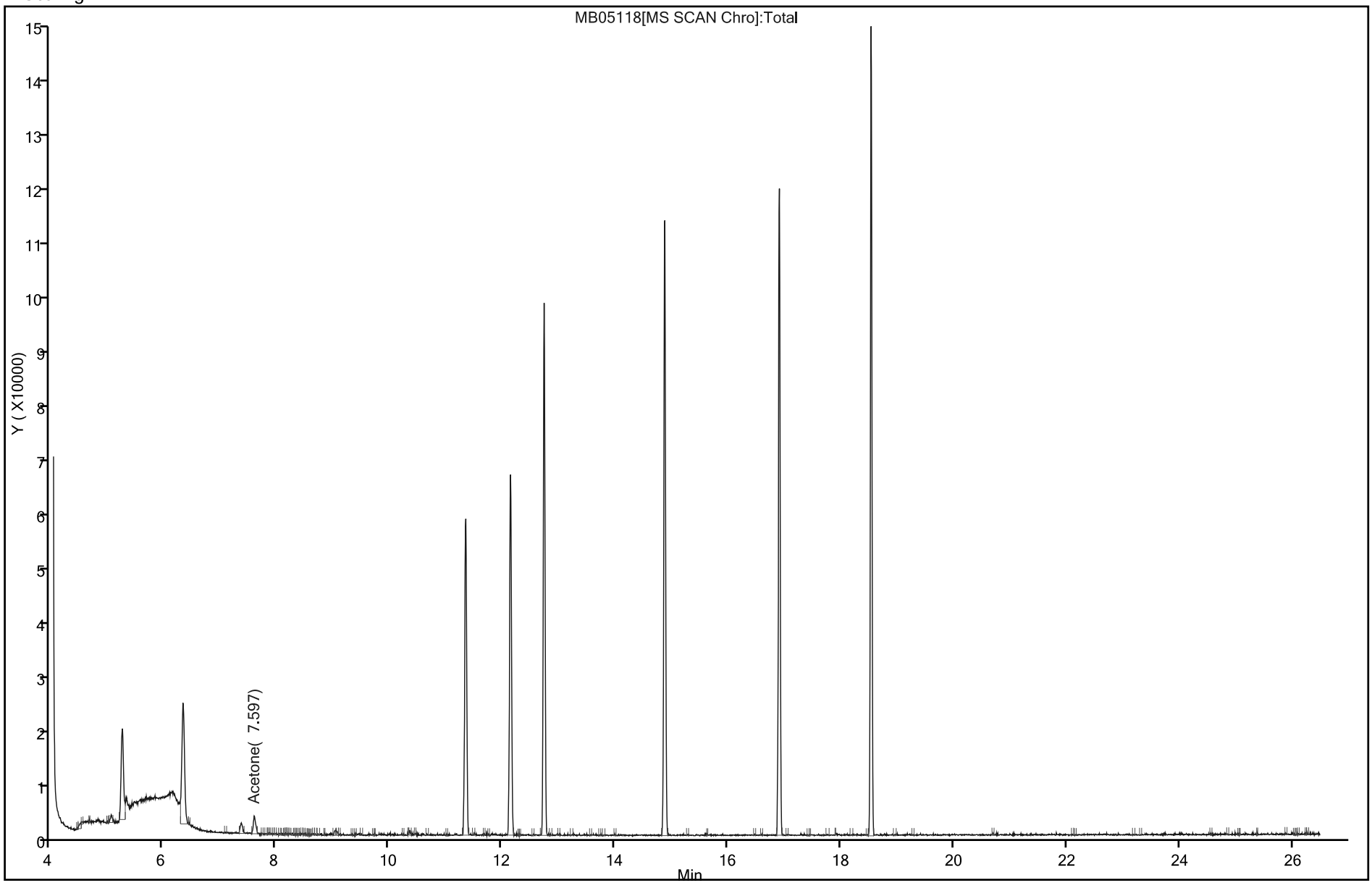
CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-130
2037-26-5	Toluene-d8 (Surr)	99		70-130

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Lachrom\ChromData\MSG\20120511-1101.b\MB05118.d		
Lims ID:	340-1890-A-1	Client ID:	34000676
Inject. Date:	11-May-2012 22:47:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	340-1890-A-1		
Misc. Info.:	340-0001101-020		
Operator:	DLK	Instrument ID:	MSG
Vol. Injected:	1.0000	ALS Bottle#:	1
Lims Batch ID:	1564	Lims Sample ID:	20
Detector:	MS SCAN		
Method:	\\Lachrom\ChromData\MSG\20120511-1101.b\TO-15_MSG.m		
Method Label:	TO-15/TO-14A		
Last Update:	12-May-2012 12:12:18	Calib Date:	08-May-2012 16:06:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Lachrom\ChromData\MSG\20120508-1082.b\IC05089.d		
Limit Group:	TO-15-TO-15_MOD_ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	CORP-CTX-12		
First Level Reviewer: kammererd		Date:	12-May-2012 12:12:18

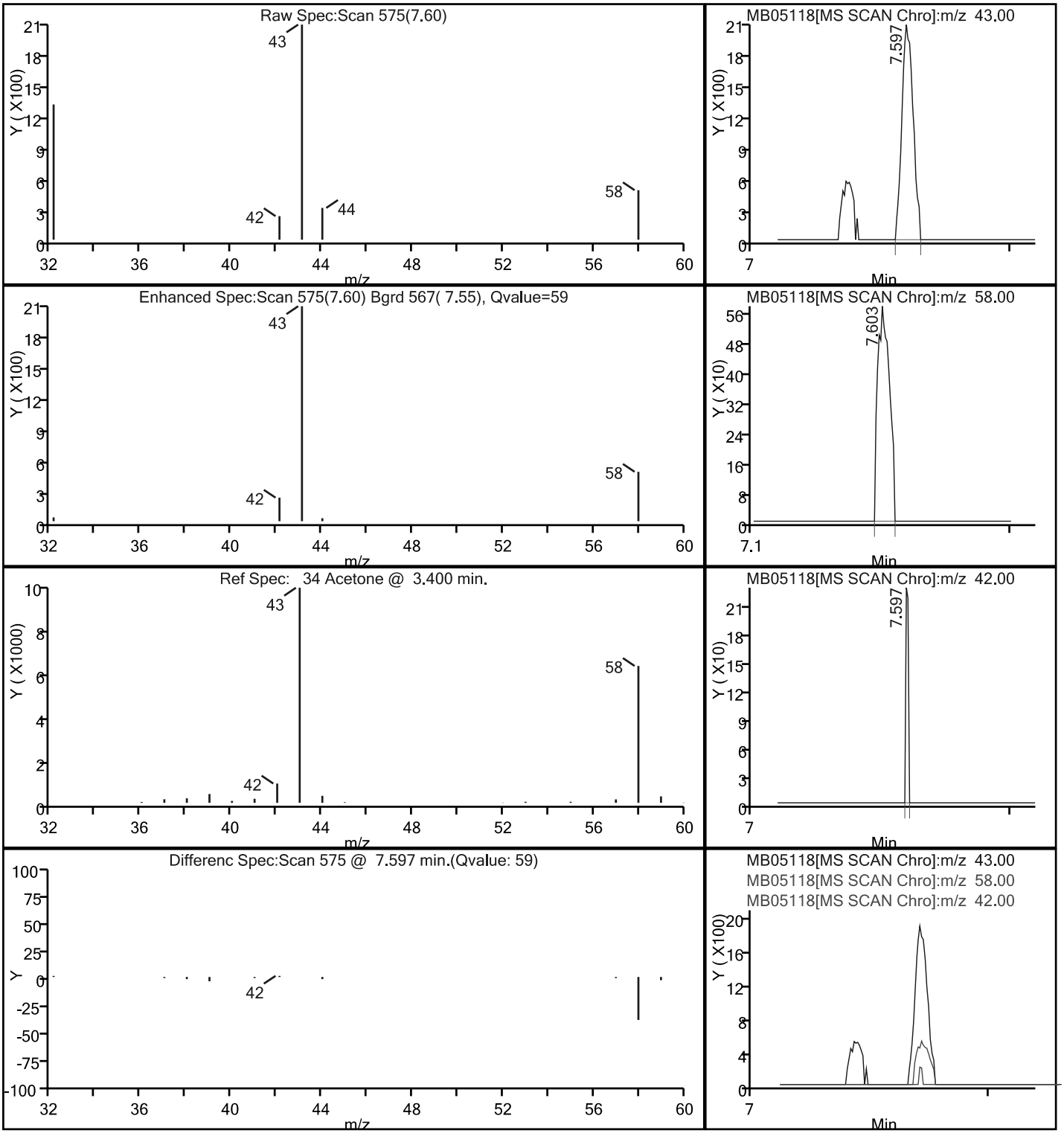
Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ppb v/v	Flags
34 Acetone	43	7.597	7.597	0.0	59	6406	0.4706	
* 57 Chlorobromomethane (IS)	49	11.348	11.348	0.0	88	40653	4.00	
$ 64 1,2-Dichloroethane-d4 (Surr)	65	12.142	12.142	0.0	98	42327	4.00	
* 70 1,4-Difluorobenzene	114	12.737	12.737	0.0	97	66808	4.00	
$ 80 Toluene-d8 (Surr)	98	14.877	14.870	0.007	94	73570	3.98	
* 89 Chlorobenzene-d5 (IS)	117	16.911	16.904	0.006	94	60085	4.00	
$ 100 4-Bromofluorobenzene (Surr)	95	18.535	18.541	-0.006	73	52403	3.99	

Report Date: 12-May-2012 12:12:18 Chrom Revision: 2.0 09-Mar-2012 13:24:42
Data File: \\Lachrom\ChromData\MSG\20120511-1101.b\MB05118.d
Injection Date: 11-May-2012 22:47:30 Limit Group: TO-15-TO-15_MOD_ICAL
Client ID: 34000676 Instrument ID: MSG
Lims Batch ID: 1564 Lims Sample ID: 20
Operator ID: DLK
Column Type: RTX-Volatiles Column Dia: 0.32 mm
Y Scaling:



Report Date: 12-May-2012 12:12:18 Chrom Revision: 2.0 09-Mar-2012 13:24:42
Data File: \\Lachrom\ChromData\MSG\20120511-1101.b\MB05118.d
Injection Date: 11-May-2012 22:47:30 Limit Group: TO-15-TO-15_MOD_ICAL
Client ID: 34000676 Instrument ID: MSG
Lims Batch ID: 1564 Lims Sample ID: 20
Operator ID: DLK
Column Type: RTX-Volatiles Column Dia: 0.32 mm

34 Acetone



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1892-1

SDG No.:

Client Sample ID: 34001121 Lab Sample ID: 340-1892-1

Matrix: Air Lab File ID: MB05089.d

Analysis Method: TO-15 Date Collected: 05/07/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/09/2012 07:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1534 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		0.80	0.30
107-02-8	Acrolein	ND		4.0	2.0
107-13-1	Acrylonitrile	ND		2.0	0.50
107-05-1	Allyl chloride	ND		0.50	0.25
71-43-2	Benzene	ND		0.30	0.15
100-44-7	Benzyl chloride	ND		0.80	0.25
75-27-4	Bromodichloromethane	ND		0.30	0.15
75-25-2	Bromoform	ND		0.40	0.20
74-83-9	Bromomethane	ND		0.80	0.20
106-99-0	1,3-Butadiene	ND		0.80	0.40
106-97-8	n-Butane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		0.80	0.40
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.80
104-51-8	n-Butylbenzene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
98-06-6	tert-Butylbenzene	ND		0.80	0.40
75-15-0	Carbon disulfide	ND		0.80	0.20
56-23-5	Carbon tetrachloride	ND	*	0.80	0.25
75-00-3	Chloroethane	ND	*	0.80	0.20
108-90-7	Chlorobenzene	ND		0.30	0.10
75-45-6	Chlorodifluoromethane	ND		1.0	0.40
67-66-3	Chloroform	ND		0.30	0.10
74-87-3	Chloromethane	ND	*	0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.50	0.25
110-82-7	Cyclohexane	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.40	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.20
74-95-3	Dibromomethane	ND		0.40	0.20
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	*	0.40	0.20
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.15
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.15
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.15
107-06-2	1,2-Dichloroethane	ND		0.80	0.30

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1892-1

SDG No.:

Client Sample ID: 34001121 Lab Sample ID: 340-1892-1

Matrix: Air Lab File ID: MB05089.d

Analysis Method: TO-15 Date Collected: 05/07/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/09/2012 07:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1534 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.20
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.20
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.20
78-87-5	1,2-Dichloropropane	ND		0.40	0.20
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.20
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.20
123-91-1	1,4-Dioxane	ND		0.80	0.40
141-78-6	Ethyl acetate	ND		0.30	0.15
100-41-4	Ethylbenzene	ND		0.40	0.15
622-96-8	4-Ethyltoluene	ND		0.40	0.20
142-82-5	n-Heptane	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		0.40	0.20
110-54-3	n-Hexane	ND		1.0	0.40
591-78-6	2-Hexanone	ND		0.40	0.25
98-82-8	Isopropylbenzene	ND		0.80	0.25
99-87-6	4-Isopropyltoluene	ND		0.80	0.25
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.30
80-62-6	Methyl methacrylate	ND		0.40	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20
75-09-2	Methylene chloride	ND		0.40	0.20
98-83-9	alpha-Methylstyrene	ND		0.40	0.15
91-20-3	Naphthalene	ND		2.0	0.80
111-65-9	n-Octane	ND		0.40	0.15
109-66-0	n-Pentane	ND		1.0	0.30
115-07-1	Propylene	ND		1.0	0.50
103-65-1	n-Propylbenzene	ND		0.50	0.20
100-42-5	Styrene	ND		0.40	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.10
127-18-4	Tetrachloroethene	ND		0.40	0.20
109-99-9	Tetrahydrofuran	ND		2.0	0.50
108-88-3	Toluene	ND		0.40	0.20
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		0.40	0.20
120-82-1	1,2,4-Trichlorobenzene	ND		2.5	1.0
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.15
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1892-1

SDG No.:

Client Sample ID: 34001121 Lab Sample ID: 340-1892-1

Matrix: Air Lab File ID: MB05089.d

Analysis Method: TO-15 Date Collected: 05/07/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/09/2012 07:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1534 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.20
75-69-4	Trichlorofluoromethane	ND		0.40	0.15
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.20
95-63-6	1,2,4-Trimethylbenzene	ND		2.5	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.25
540-84-1	2,2,4-Trimethylpentane	ND		0.50	0.20
108-05-4	Vinyl acetate	ND		0.80	0.20
593-60-2	Vinyl bromide	ND		0.40	0.20
75-01-4	Vinyl chloride	ND	*	0.20	0.10
179601-23-1	m,p-Xylene	ND		0.80	0.20
95-47-6	o-Xylene	ND		0.40	0.20

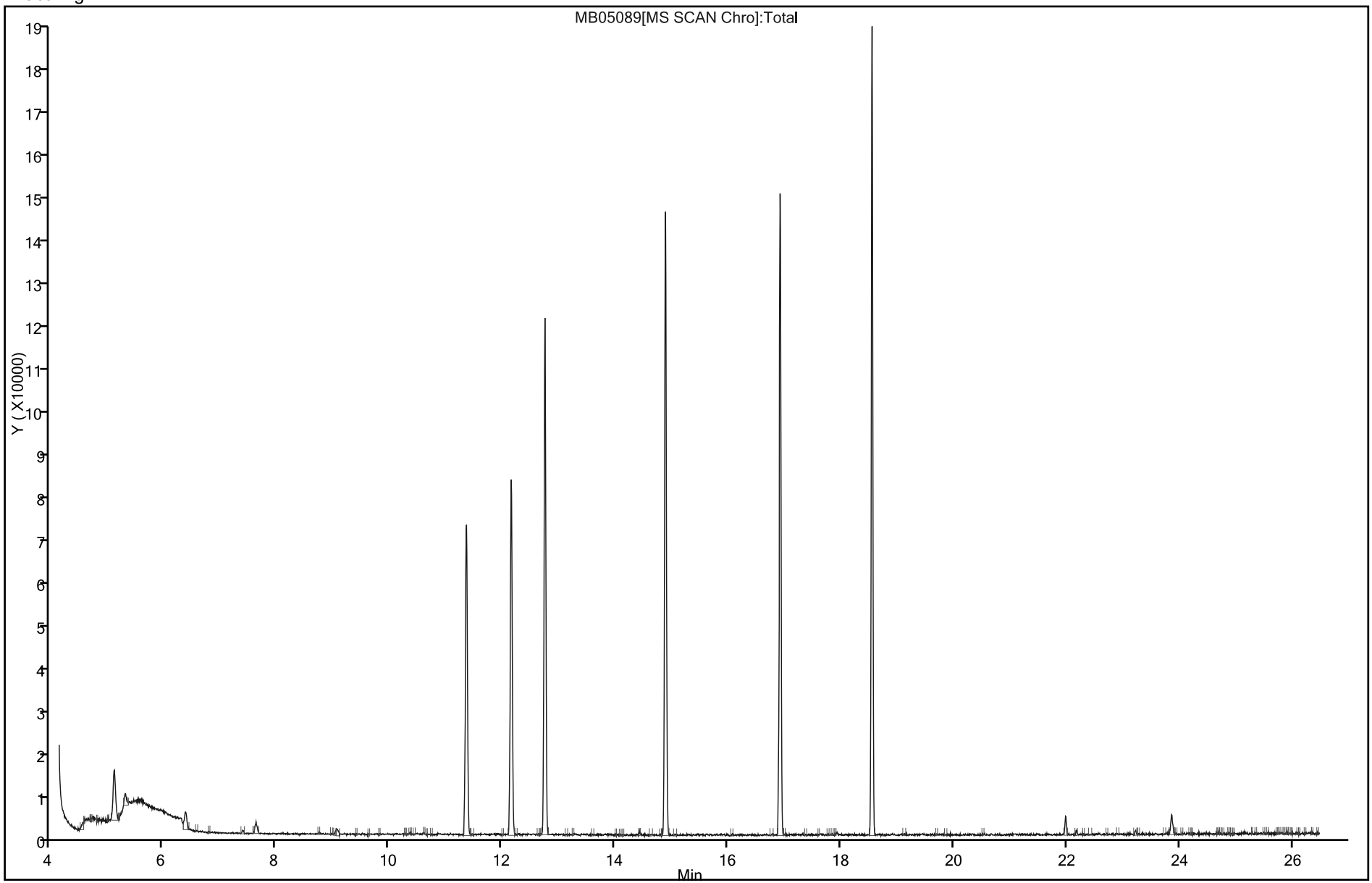
CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Lachrom\ChromData\MSG\20120508-1082.b\MB05089.d		
Lims ID:	340-1892-A-1	Client ID:	34001121
Inject. Date:	09-May-2012 07:00:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	340-1892-A-1		
Misc. Info.:	340-0001082-031		
Operator:	DLK	Instrument ID:	MSG
Vol. Injected:	1.0000	ALS Bottle#:	3
Lims Batch ID:	1534	Lims Sample ID:	31
Detector:	MS SCAN		
Method:	\\Lachrom\ChromData\MSG\20120508-1082.b\TO-15_MSG.m		
Method Label:	TO-15/TO-14A		
Last Update:	09-May-2012 10:31:57	Calib Date:	08-May-2012 16:06:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Lachrom\ChromData\MSG\20120508-1082.b\IC05089.d		
Limit Group:	TO-15-TO-15_MOD_ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	CORP-CTX-12		
First Level Reviewer: kammererd		Date:	09-May-2012 10:31:57

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ppb v/v	Flags
* 57 Chlorobromomethane (IS)	49	11.361	11.361	0.0	90	52587	4.00	
$ 64 1,2-Dichloroethane-d4 (Surr)	65	12.155	12.155	0.0	98	55403	4.04	
* 70 1,4-Difluorobenzene	114	12.750	12.750	0.0	98	85050	4.00	
$ 80 Toluene-d8 (Surr)	98	14.890	14.883	0.007	94	95423	4.05	
* 89 Chlorobenzene-d5 (IS)	117	16.923	16.923	0.0	96	78083	4.00	
$ 100 4-Bromofluorobenzene (Surr)	95	18.554	18.554	0.0	74	67399	3.95	

Report Date: 09-May-2012 10:31:57 Chrom Revision: 2.0 09-Mar-2012 13:24:42
Data File: \\Lachrom\ChromData\MSG\20120508-1082.b\MB05089.d
Injection Date: 09-May-2012 07:00:30 Limit Group: TO-15-TO-15_MOD_ICAL
Client ID: 34001121 Instrument ID: MSG
Lims Batch ID: 1534 Lims Sample ID: 31
Operator ID: DLK
Column Type: RTX-Volatiles Column Dia: 0.32 mm
Y Scaling:



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1906-1

SDG No.:

Client Sample ID: 34000868 Lab Sample ID: 340-1906-1

Matrix: Air Lab File ID: MB05094.d

Analysis Method: TO-15 Date Collected: 05/09/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/10/2012 01:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1543 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		0.80	0.30
107-02-8	Acrolein	ND		4.0	2.0
107-13-1	Acrylonitrile	ND		2.0	0.50
107-05-1	Allyl chloride	ND		0.50	0.25
71-43-2	Benzene	ND		0.30	0.15
100-44-7	Benzyl chloride	ND		0.80	0.25
75-27-4	Bromodichloromethane	ND		0.30	0.15
75-25-2	Bromoform	ND		0.40	0.20
74-83-9	Bromomethane	ND		0.80	0.20
106-99-0	1,3-Butadiene	ND		0.80	0.40
106-97-8	n-Butane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		0.80	0.40
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.80
104-51-8	n-Butylbenzene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
98-06-6	tert-Butylbenzene	ND		0.80	0.40
75-15-0	Carbon disulfide	ND		0.80	0.20
56-23-5	Carbon tetrachloride	ND		0.80	0.25
75-00-3	Chloroethane	ND	*	0.80	0.20
108-90-7	Chlorobenzene	ND		0.30	0.10
75-45-6	Chlorodifluoromethane	ND		1.0	0.40
67-66-3	Chloroform	ND		0.30	0.10
74-87-3	Chloromethane	ND	*	0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.50	0.25
110-82-7	Cyclohexane	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.40	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.20
74-95-3	Dibromomethane	ND		0.40	0.20
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	*	0.40	0.20
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.15
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.15
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.15
107-06-2	1,2-Dichloroethane	ND		0.80	0.30

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1906-1

SDG No.:

Client Sample ID: 34000868 Lab Sample ID: 340-1906-1

Matrix: Air Lab File ID: MB05094.d

Analysis Method: TO-15 Date Collected: 05/09/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/10/2012 01:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1543 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.20
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.20
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.20
78-87-5	1,2-Dichloropropane	ND		0.40	0.20
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.20
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.20
123-91-1	1,4-Dioxane	ND		0.80	0.40
141-78-6	Ethyl acetate	ND		0.30	0.15
100-41-4	Ethylbenzene	ND		0.40	0.15
622-96-8	4-Ethyltoluene	ND		0.40	0.20
142-82-5	n-Heptane	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND	*	0.40	0.20
110-54-3	n-Hexane	ND		1.0	0.40
591-78-6	2-Hexanone	ND		0.40	0.25
98-82-8	Isopropylbenzene	ND		0.80	0.25
99-87-6	4-Isopropyltoluene	ND		0.80	0.25
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.30
80-62-6	Methyl methacrylate	ND		0.40	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20
75-09-2	Methylene chloride	ND		0.40	0.20
98-83-9	alpha-Methylstyrene	ND		0.40	0.15
91-20-3	Naphthalene	ND		2.0	0.80
111-65-9	n-Octane	ND		0.40	0.15
109-66-0	n-Pentane	ND		1.0	0.30
115-07-1	Propylene	ND		1.0	0.50
103-65-1	n-Propylbenzene	ND		0.50	0.20
100-42-5	Styrene	ND		0.40	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.10
127-18-4	Tetrachloroethene	ND		0.40	0.20
109-99-9	Tetrahydrofuran	ND		2.0	0.50
108-88-3	Toluene	ND		0.40	0.20
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		0.40	0.20
120-82-1	1,2,4-Trichlorobenzene	ND		2.5	1.0
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.15
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1906-1

SDG No.:

Client Sample ID: 34000868 Lab Sample ID: 340-1906-1

Matrix: Air Lab File ID: MB05094.d

Analysis Method: TO-15 Date Collected: 05/09/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/10/2012 01:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1543 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.20
75-69-4	Trichlorofluoromethane	ND		0.40	0.15
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.20
95-63-6	1,2,4-Trimethylbenzene	ND		2.5	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.25
540-84-1	2,2,4-Trimethylpentane	ND		0.50	0.20
108-05-4	Vinyl acetate	ND		0.80	0.20
593-60-2	Vinyl bromide	ND		0.40	0.20
75-01-4	Vinyl chloride	ND	*	0.20	0.10
179601-23-1	m,p-Xylene	ND		0.80	0.20
95-47-6	o-Xylene	ND		0.40	0.20

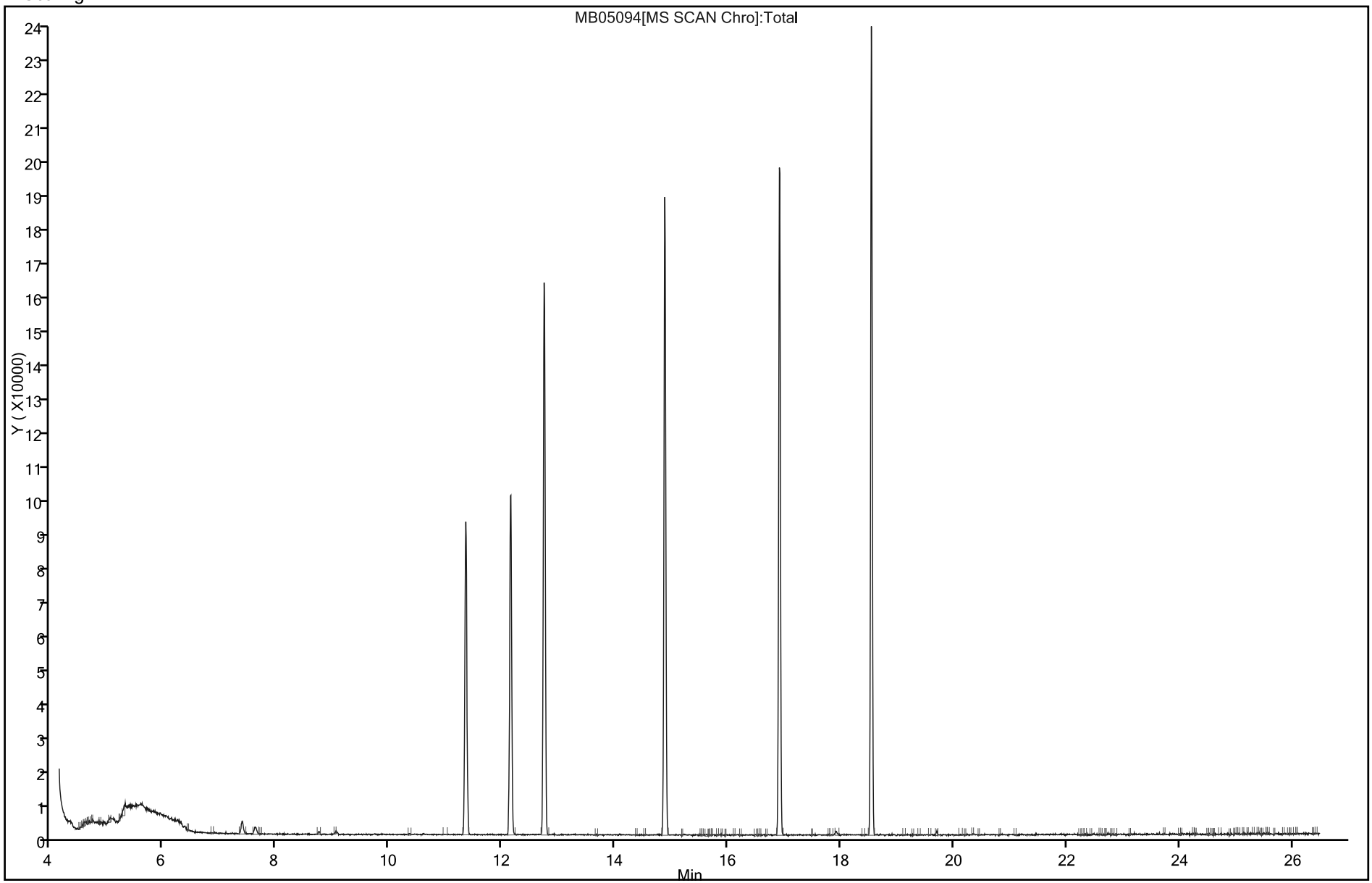
CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-130
2037-26-5	Toluene-d8 (Surr)	94		70-130

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Lachrom\ChromData\MSG\20120509-1088.b\MB05094.d		
Lims ID:	340-1906-A-1	Client ID:	34000868
Inject. Date:	10-May-2012 01:49:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	340-1906-A-1		
Misc. Info.:	340-0001088-025		
Operator:	DLK	Instrument ID:	MSG
Vol. Injected:	1.0000	ALS Bottle#:	8
Lims Batch ID:	1543	Lims Sample ID:	25
Detector:	MS SCAN		
Method:	\\Lachrom\ChromData\MSG\20120509-1088.b\TO-15_MSG.m		
Method Label:	TO-15/TO-14A		
Last Update:	10-May-2012 10:47:37	Calib Date:	08-May-2012 16:06:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Lachrom\ChromData\MSG\20120508-1082.b\IC05089.d		
Limit Group:	TO-15-TO-15_MOD_ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	CORP-CTX-12		
First Level Reviewer: kammererd		Date:	10-May-2012 10:47:37

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ppb v/v	Flags
* 57 Chlorobromomethane (IS)	49	11.349	11.355	-0.006	93	67523	4.00	
$ 64 1,2-Dichloroethane-d4 (Surr)	65	12.143	12.149	-0.006	97	69890	3.97	
* 70 1,4-Difluorobenzene	114	12.738	12.744	-0.006	97	135676	4.00	
$ 80 Toluene-d8 (Surr)	98	14.877	14.883	-0.006	95	140515	3.74	
* 89 Chlorobenzene-d5 (IS)	117	16.911	16.917	-0.006	93	117517	4.00	
$ 100 4-Bromofluorobenzene (Surr)	95	18.542	18.548	-0.006	76	97287	3.79	

Report Date: 10-May-2012 10:47:37 Chrom Revision: 2.0 09-Mar-2012 13:24:42
Data File: \\Lachrom\ChromData\MSG\20120509-1088.b\MB05094.d
Injection Date: 10-May-2012 01:49:30 Limit Group: TO-15-TO-15_MOD_ICAL
Client ID: 34000868 Instrument ID: MSG
Lims Batch ID: 1543 Lims Sample ID: 25
Operator ID: DLK
Column Type: RTX-Volatiles Column Dia: 0.32 mm
Y Scaling:



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1915-1

SDG No.:

Client Sample ID: 34001093 Lab Sample ID: 340-1915-1

Matrix: Air Lab File ID: MB05244.d

Analysis Method: TO-15 Date Collected: 05/09/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/24/2012 14:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1681 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.74	J	0.80	0.30
107-02-8	Acrolein	ND		4.0	2.0
107-13-1	Acrylonitrile	ND		2.0	0.50
107-05-1	Allyl chloride	ND		0.50	0.25
71-43-2	Benzene	ND		0.30	0.15
100-44-7	Benzyl chloride	ND		0.80	0.25
75-27-4	Bromodichloromethane	ND		0.30	0.15
75-25-2	Bromoform	ND		0.40	0.20
74-83-9	Bromomethane	ND		0.80	0.20
106-99-0	1,3-Butadiene	ND		0.80	0.40
106-97-8	n-Butane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		0.80	0.40
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.80
104-51-8	n-Butylbenzene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
98-06-6	tert-Butylbenzene	ND		0.80	0.40
75-15-0	Carbon disulfide	ND		0.80	0.20
56-23-5	Carbon tetrachloride	ND		0.80	0.25
75-00-3	Chloroethane	ND		0.80	0.20
108-90-7	Chlorobenzene	ND		0.30	0.10
75-45-6	Chlorodifluoromethane	ND		1.0	0.40
67-66-3	Chloroform	ND		0.30	0.10
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.50	0.25
110-82-7	Cyclohexane	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.40	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.20
74-95-3	Dibromomethane	ND		0.40	0.20
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroeth ane	ND		0.40	0.20
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.15
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.15
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.15
107-06-2	1,2-Dichloroethane	ND		0.80	0.30

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1915-1

SDG No.:

Client Sample ID: 34001093 Lab Sample ID: 340-1915-1

Matrix: Air Lab File ID: MB05244.d

Analysis Method: TO-15 Date Collected: 05/09/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/24/2012 14:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1681 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.20
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.20
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.20
78-87-5	1,2-Dichloropropane	ND		0.40	0.20
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.20
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.20
123-91-1	1,4-Dioxane	ND		0.80	0.40
141-78-6	Ethyl acetate	ND		0.30	0.15
100-41-4	Ethylbenzene	ND		0.40	0.15
622-96-8	4-Ethyltoluene	ND		0.40	0.20
142-82-5	n-Heptane	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		0.40	0.20
110-54-3	n-Hexane	ND		1.0	0.40
591-78-6	2-Hexanone	ND		0.40	0.25
98-82-8	Isopropylbenzene	ND		0.80	0.25
99-87-6	4-Isopropyltoluene	ND		0.80	0.25
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.30
80-62-6	Methyl methacrylate	ND		0.40	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20
75-09-2	Methylene chloride	ND		0.40	0.20
98-83-9	alpha-Methylstyrene	ND		0.40	0.15
91-20-3	Naphthalene	ND		2.0	0.80
111-65-9	n-Octane	ND		0.40	0.15
109-66-0	n-Pentane	ND		1.0	0.30
115-07-1	Propylene	ND		1.0	0.50
103-65-1	n-Propylbenzene	ND		0.50	0.20
100-42-5	Styrene	ND		0.40	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.10
127-18-4	Tetrachloroethene	ND		0.40	0.20
109-99-9	Tetrahydrofuran	ND		2.0	0.50
108-88-3	Toluene	ND		0.40	0.20
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		0.40	0.20
120-82-1	1,2,4-Trichlorobenzene	ND		2.5	1.0
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.15
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1915-1

SDG No.:

Client Sample ID: 34001093 Lab Sample ID: 340-1915-1

Matrix: Air Lab File ID: MB05244.d

Analysis Method: TO-15 Date Collected: 05/09/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/24/2012 14:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1681 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.20
75-69-4	Trichlorofluoromethane	ND		0.40	0.15
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.20
95-63-6	1,2,4-Trimethylbenzene	ND		2.5	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.25
540-84-1	2,2,4-Trimethylpentane	ND		0.50	0.20
108-05-4	Vinyl acetate	ND		0.80	0.20
593-60-2	Vinyl bromide	ND		0.40	0.20
75-01-4	Vinyl chloride	ND		0.20	0.10
179601-23-1	m,p-Xylene	ND		0.80	0.20
95-47-6	o-Xylene	ND		0.40	0.20

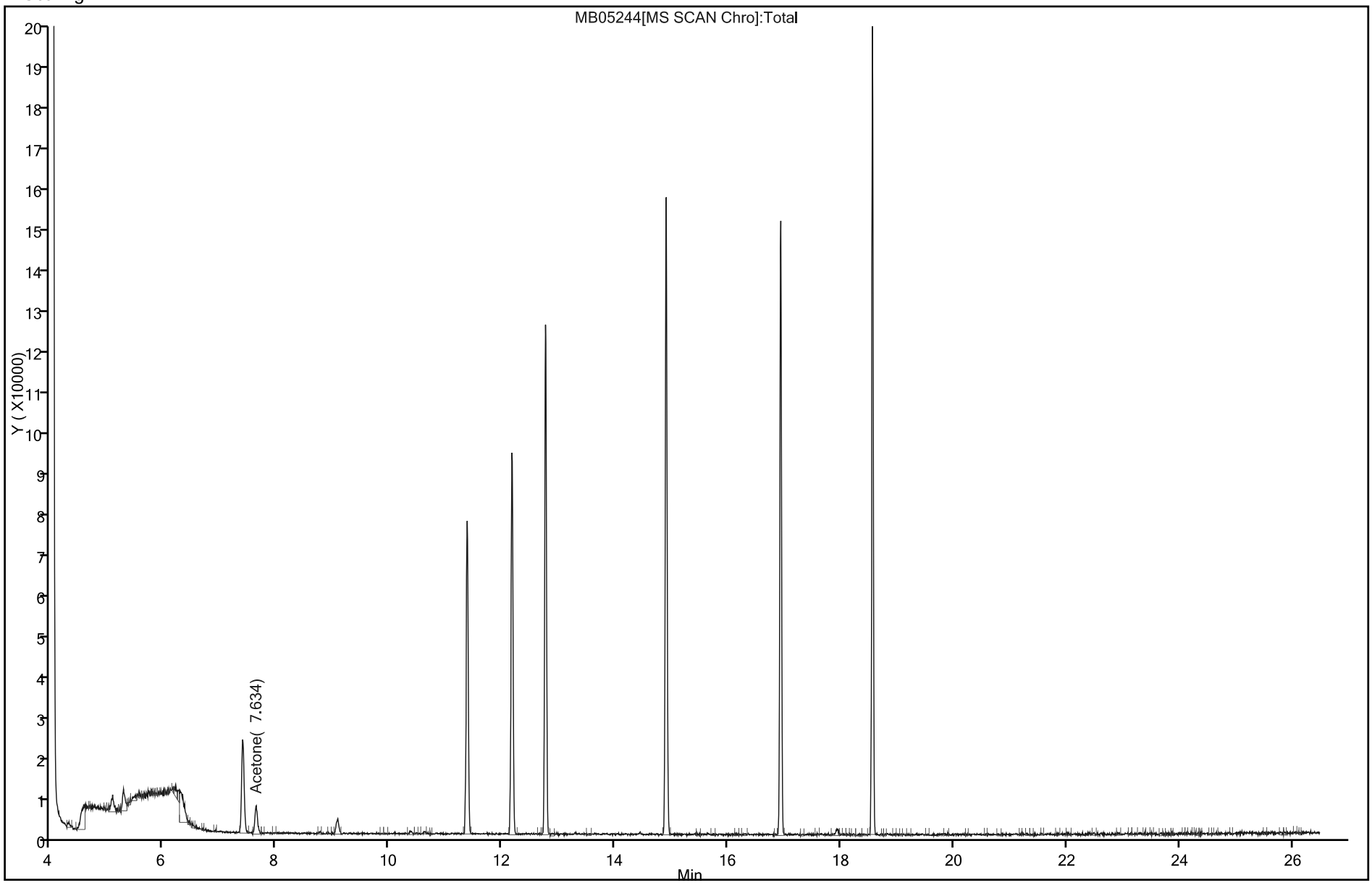
CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	107		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		70-130
2037-26-5	Toluene-d8 (Surr)	93		70-130

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Lachrom\ChromData\MSG\20120524-1181.b\MB05244.d		
Lims ID:	340-1915-A-1	Client ID:	34001093
Inject. Date:	24-May-2012 14:41:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	340-1915-A-1		
Misc. Info.:	340-0001181-009		
Operator:	DLK	Instrument ID:	MSG
Vol. Injected:	1.0000	ALS Bottle#:	3
Lims Batch ID:	1681	Lims Sample ID:	9
Detector:	MS SCAN		
Method:	\\Lachrom\ChromData\MSG\20120524-1181.b\TO-15_MSG.m		
Method Label:	TO-15/TO-14A		
Last Update:	24-May-2012 15:39:29	Calib Date:	14-May-2012 14:21:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Lachrom\ChromData\MSG\20120512-1108.b\IC05148.d		
Limit Group:	TO-15-TO-15_MOD_ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	CORP-CTX-12		
First Level Reviewer: kammererd		Date:	24-May-2012 15:39:29

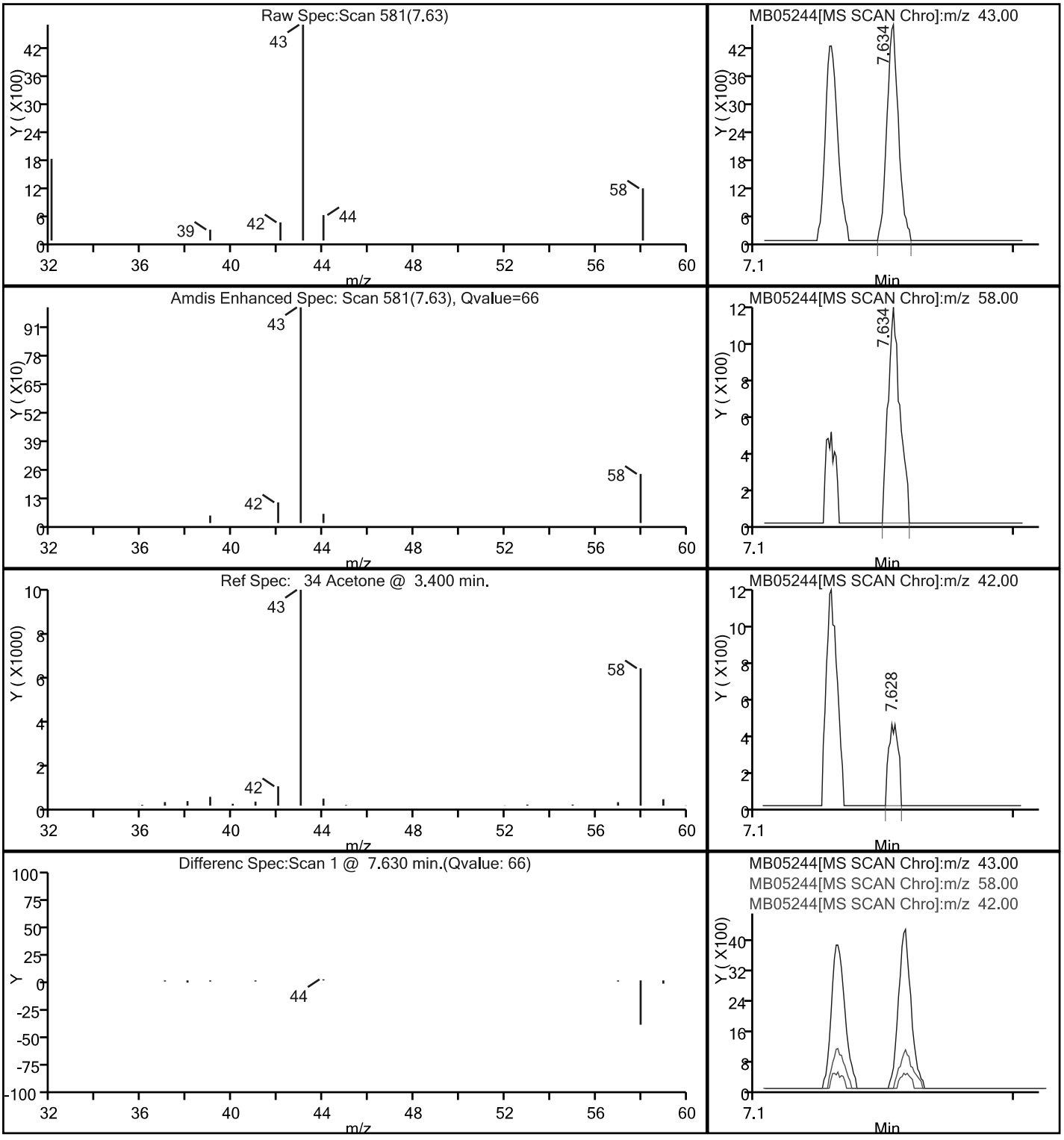
Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ppb v/v	Flags
34 Acetone	43	7.634	7.634	0.0	66	14544	0.7420	
* 57 Chlorobromomethane (IS)	49	11.373	11.379	-0.006	87	55235	4.00	
$ 64 1,2-Dichloroethane-d4 (Surr)	65	12.167	12.179	-0.012	97	65414	4.22	
* 70 1,4-Difluorobenzene	114	12.762	12.768	-0.006	97	86092	4.00	
$ 80 Toluene-d8 (Surr)	98	14.901	14.901	0.0	93	92976	3.71	
* 89 Chlorobenzene-d5 (IS)	117	16.935	16.935	0.0	98	72635	4.00	
$ 100 4-Bromofluorobenzene (Surr)	95	18.560	18.566	-0.006	72	65140	4.27	

Report Date: 24-May-2012 15:39:30 Chrom Revision: 2.0 09-Mar-2012 13:24:42
Data File: \\Lachrom\ChromData\MSG\20120524-1181.b\MB05244.d
Injection Date: 24-May-2012 14:41:30 Limit Group: TO-15-TO-15_MOD_ICAL
Client ID: 34001093 Instrument ID: MSG
Lims Batch ID: 1681 Lims Sample ID: 9
Operator ID: DLK
Column Type: RTX-Volatiles Column Dia: 0.32 mm
Y Scaling:



Report Date: 24-May-2012 15:39:30 Chrom Revision: 2.0 09-Mar-2012 13:24:42
Data File: \\Lachrom\ChromData\MSG\20120524-1181.b\MB05244.d
Injection Date: 24-May-2012 14:41:30 Limit Group: TO-15-TO-15_MOD_ICAL
Client ID: 34001093 Instrument ID: MSG
Lims Batch ID: 1681 Lims Sample ID: 9
Operator ID: DLK
Column Type: RTX-Volatiles Column Dia: 0.32 mm

34 Acetone



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1966-1

SDG No.:

Client Sample ID: 34000626 Lab Sample ID: 340-1966-1

Matrix: Air Lab File ID: MB05217.d

Analysis Method: TO-15 Date Collected: 05/14/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/21/2012 20:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1651 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.52	J B	0.80	0.30
107-02-8	Acrolein	ND		4.0	2.0
107-13-1	Acrylonitrile	ND		2.0	0.50
107-05-1	Allyl chloride	ND		0.50	0.25
71-43-2	Benzene	ND		0.30	0.15
100-44-7	Benzyl chloride	ND		0.80	0.25
75-27-4	Bromodichloromethane	ND		0.30	0.15
75-25-2	Bromoform	ND		0.40	0.20
74-83-9	Bromomethane	ND		0.80	0.20
106-99-0	1,3-Butadiene	ND		0.80	0.40
106-97-8	n-Butane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		0.80	0.40
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.80
104-51-8	n-Butylbenzene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
98-06-6	tert-Butylbenzene	ND		0.80	0.40
75-15-0	Carbon disulfide	ND		0.80	0.20
56-23-5	Carbon tetrachloride	ND		0.80	0.25
75-00-3	Chloroethane	ND		0.80	0.20
108-90-7	Chlorobenzene	ND		0.30	0.10
75-45-6	Chlorodifluoromethane	ND		1.0	0.40
67-66-3	Chloroform	ND		0.30	0.10
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.50	0.25
110-82-7	Cyclohexane	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.40	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.20
74-95-3	Dibromomethane	ND		0.40	0.20
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroeth ane	ND		0.40	0.20
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.15
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.15
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.15
107-06-2	1,2-Dichloroethane	ND		0.80	0.30

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1966-1

SDG No.:

Client Sample ID: 34000626 Lab Sample ID: 340-1966-1

Matrix: Air Lab File ID: MB05217.d

Analysis Method: TO-15 Date Collected: 05/14/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/21/2012 20:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1651 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.20
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.20
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.20
78-87-5	1,2-Dichloropropane	ND		0.40	0.20
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.20
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.20
123-91-1	1,4-Dioxane	ND		0.80	0.40
141-78-6	Ethyl acetate	ND	*	0.30	0.15
100-41-4	Ethylbenzene	ND		0.40	0.15
622-96-8	4-Ethyltoluene	ND		0.40	0.20
142-82-5	n-Heptane	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		0.40	0.20
110-54-3	n-Hexane	ND		1.0	0.40
591-78-6	2-Hexanone	ND		0.40	0.25
98-82-8	Isopropylbenzene	ND		0.80	0.25
99-87-6	4-Isopropyltoluene	ND		0.80	0.25
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.30
80-62-6	Methyl methacrylate	ND		0.40	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20
75-09-2	Methylene chloride	ND		0.40	0.20
98-83-9	alpha-Methylstyrene	ND		0.40	0.15
91-20-3	Naphthalene	ND		2.0	0.80
111-65-9	n-Octane	ND		0.40	0.15
109-66-0	n-Pentane	ND		1.0	0.30
115-07-1	Propylene	ND		1.0	0.50
103-65-1	n-Propylbenzene	ND		0.50	0.20
100-42-5	Styrene	ND		0.40	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.10
127-18-4	Tetrachloroethene	ND		0.40	0.20
109-99-9	Tetrahydrofuran	ND		2.0	0.50
108-88-3	Toluene	ND		0.40	0.20
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		0.40	0.20
120-82-1	1,2,4-Trichlorobenzene	ND		2.5	1.0
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.15
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-1966-1

SDG No.:

Client Sample ID: 34000626 Lab Sample ID: 340-1966-1

Matrix: Air Lab File ID: MB05217.d

Analysis Method: TO-15 Date Collected: 05/14/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/21/2012 20:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1651 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.20
75-69-4	Trichlorofluoromethane	ND		0.40	0.15
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.20
95-63-6	1,2,4-Trimethylbenzene	ND		2.5	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.25
540-84-1	2,2,4-Trimethylpentane	ND		0.50	0.20
108-05-4	Vinyl acetate	ND		0.80	0.20
593-60-2	Vinyl bromide	ND		0.40	0.20
75-01-4	Vinyl chloride	ND		0.20	0.10
179601-23-1	m,p-Xylene	ND		0.80	0.20
95-47-6	o-Xylene	ND		0.40	0.20

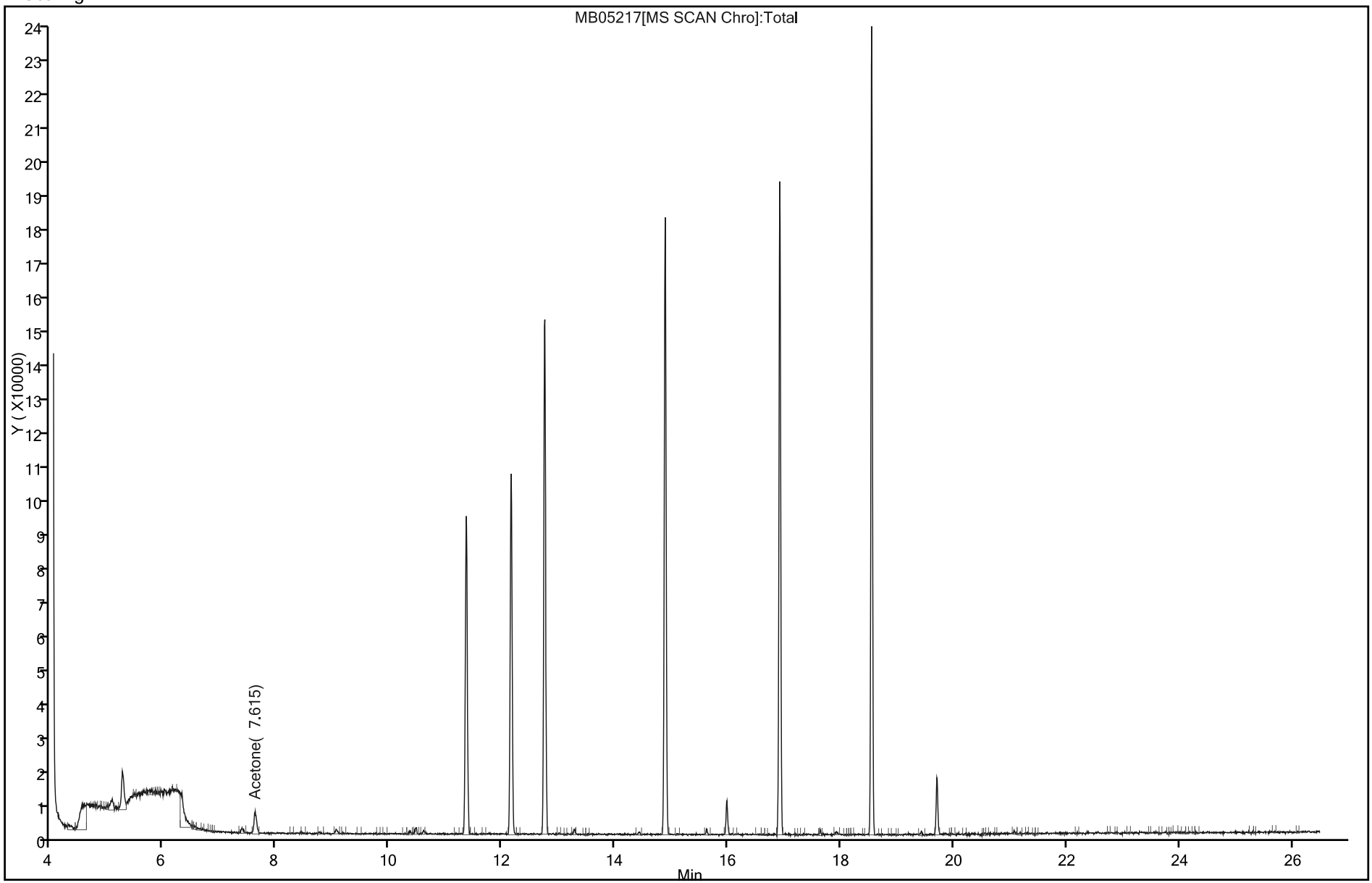
CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-130
2037-26-5	Toluene-d8 (Surr)	91		70-130

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Lachrom\ChromData\MSG\20120521-1159.b\MB05217.d		
Lims ID:	340-1966-A-1	Client ID:	34000626
Inject. Date:	21-May-2012 20:18:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	340-1966-A-1		
Misc. Info.:	340-0001159-016		
Operator:	DLK	Instrument ID:	MSG
Vol. Injected:	1.0000	ALS Bottle#:	1
Lims Batch ID:	1651	Lims Sample ID:	16
Detector:	MS SCAN		
Method:	\\Lachrom\ChromData\MSG\20120521-1159.b\TO-15_MSG.m		
Method Label:	TO-15/TO-14A		
Last Update:	22-May-2012 08:34:40	Calib Date:	14-May-2012 14:21:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Lachrom\ChromData\MSG\20120512-1108.b\IC05148.d		
Limit Group:	TO-15-TO-15_MOD_ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	CORP-CTX-12		
First Level Reviewer: kammererd		Date:	22-May-2012 08:34:40

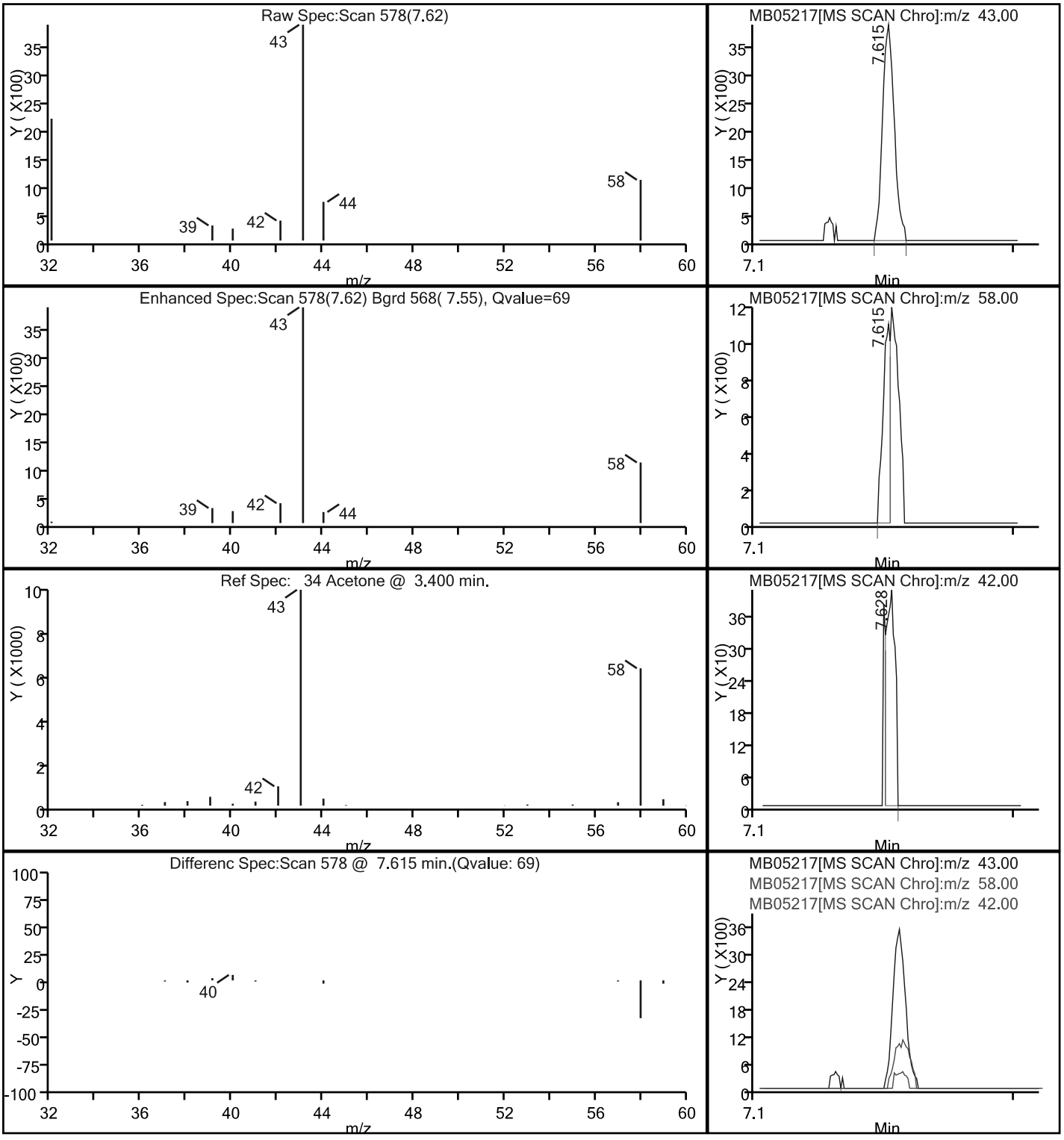
Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ppb v/v	Flags
34 Acetone	43	7.615	7.634	-0.019	69	12276	0.5245	
* 57 Chlorobromomethane (IS)	49	11.354	11.379	-0.025	90	65960	4.00	
$ 64 1,2-Dichloroethane-d4 (Surr)	65	12.154	12.173	-0.019	98	70126	3.79	
* 70 1,4-Difluorobenzene	114	12.749	12.768	-0.019	98	112176	4.00	
$ 80 Toluene-d8 (Surr)	98	14.883	14.901	-0.018	94	119102	3.65	
* 89 Chlorobenzene-d5 (IS)	117	16.916	16.935	-0.019	96	99489	4.00	
$ 100 4-Bromofluorobenzene (Surr)	95	18.547	18.560	-0.013	74	84959	4.06	

Report Date: 22-May-2012 08:34:40 Chrom Revision: 2.0 09-Mar-2012 13:24:42
Data File: \\Lachrom\ChromData\MSG\20120521-1159.b\MB05217.d
Injection Date: 21-May-2012 20:18:30 Limit Group: TO-15-TO-15_MOD_ICAL
Client ID: 34000626 Instrument ID: MSG
Lims Batch ID: 1651 Lims Sample ID: 16
Operator ID: DLK
Column Type: RTX-Volatiles Column Dia: 0.32 mm
Y Scaling:



Report Date: 22-May-2012 08:34:40 Chrom Revision: 2.0 09-Mar-2012 13:24:42
Data File: \\Lachrom\ChromData\MSG\20120521-1159.b\MB05217.d
Injection Date: 21-May-2012 20:18:30 Limit Group: TO-15-TO-15_MOD_ICAL
Client ID: 34000626 Instrument ID: MSG
Lims Batch ID: 1651 Lims Sample ID: 16
Operator ID: DLK
Column Type: RTX-Volatiles Column Dia: 0.32 mm

34 Acetone



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-2164-1

SDG No.:

Client Sample ID: 34000678 Lab Sample ID: 340-2164-1

Matrix: Air Lab File ID: MB0524M.d

Analysis Method: TO-15 Date Collected: 05/23/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/25/2012 04:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1681 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	1.4		0.80	0.30
107-02-8	Acrolein	ND		4.0	2.0
107-13-1	Acrylonitrile	ND		2.0	0.50
107-05-1	Allyl chloride	ND		0.50	0.25
71-43-2	Benzene	ND		0.30	0.15
100-44-7	Benzyl chloride	ND		0.80	0.25
75-27-4	Bromodichloromethane	ND		0.30	0.15
75-25-2	Bromoform	ND		0.40	0.20
74-83-9	Bromomethane	ND		0.80	0.20
106-99-0	1,3-Butadiene	ND		0.80	0.40
106-97-8	n-Butane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		0.80	0.40
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.80
104-51-8	n-Butylbenzene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
98-06-6	tert-Butylbenzene	ND		0.80	0.40
75-15-0	Carbon disulfide	ND		0.80	0.20
56-23-5	Carbon tetrachloride	ND		0.80	0.25
75-00-3	Chloroethane	ND		0.80	0.20
108-90-7	Chlorobenzene	ND		0.30	0.10
75-45-6	Chlorodifluoromethane	ND		1.0	0.40
67-66-3	Chloroform	ND		0.30	0.10
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.50	0.25
110-82-7	Cyclohexane	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.40	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.20
74-95-3	Dibromomethane	ND		0.40	0.20
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroeth ane	ND		0.40	0.20
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.15
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.15
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.15
107-06-2	1,2-Dichloroethane	ND		0.80	0.30

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-2164-1

SDG No.:

Client Sample ID: 34000678 Lab Sample ID: 340-2164-1

Matrix: Air Lab File ID: MB0524M.d

Analysis Method: TO-15 Date Collected: 05/23/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/25/2012 04:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1681 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.20
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.20
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.20
78-87-5	1,2-Dichloropropane	ND		0.40	0.20
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.20
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.20
123-91-1	1,4-Dioxane	ND		0.80	0.40
141-78-6	Ethyl acetate	ND		0.30	0.15
100-41-4	Ethylbenzene	ND		0.40	0.15
622-96-8	4-Ethyltoluene	ND		0.40	0.20
142-82-5	n-Heptane	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		0.40	0.20
110-54-3	n-Hexane	ND		1.0	0.40
591-78-6	2-Hexanone	ND		0.40	0.25
98-82-8	Isopropylbenzene	ND		0.80	0.25
99-87-6	4-Isopropyltoluene	ND		0.80	0.25
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.30
80-62-6	Methyl methacrylate	ND		0.40	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20
75-09-2	Methylene chloride	ND		0.40	0.20
98-83-9	alpha-Methylstyrene	ND		0.40	0.15
91-20-3	Naphthalene	ND		2.0	0.80
111-65-9	n-Octane	ND		0.40	0.15
109-66-0	n-Pentane	ND		1.0	0.30
115-07-1	Propylene	ND		1.0	0.50
103-65-1	n-Propylbenzene	ND		0.50	0.20
100-42-5	Styrene	ND		0.40	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.10
127-18-4	Tetrachloroethene	ND		0.40	0.20
109-99-9	Tetrahydrofuran	ND		2.0	0.50
108-88-3	Toluene	ND		0.40	0.20
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		0.40	0.20
120-82-1	1,2,4-Trichlorobenzene	ND		2.5	1.0
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.15
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-2164-1

SDG No.:

Client Sample ID: 34000678 Lab Sample ID: 340-2164-1

Matrix: Air Lab File ID: MB0524M.d

Analysis Method: TO-15 Date Collected: 05/23/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/25/2012 04:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1681 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.20
75-69-4	Trichlorofluoromethane	ND		0.40	0.15
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.20
95-63-6	1,2,4-Trimethylbenzene	ND		2.5	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.25
540-84-1	2,2,4-Trimethylpentane	ND		0.50	0.20
108-05-4	Vinyl acetate	ND		0.80	0.20
593-60-2	Vinyl bromide	ND		0.40	0.20
75-01-4	Vinyl chloride	ND		0.20	0.10
179601-23-1	m,p-Xylene	ND		0.80	0.20
95-47-6	o-Xylene	ND		0.40	0.20

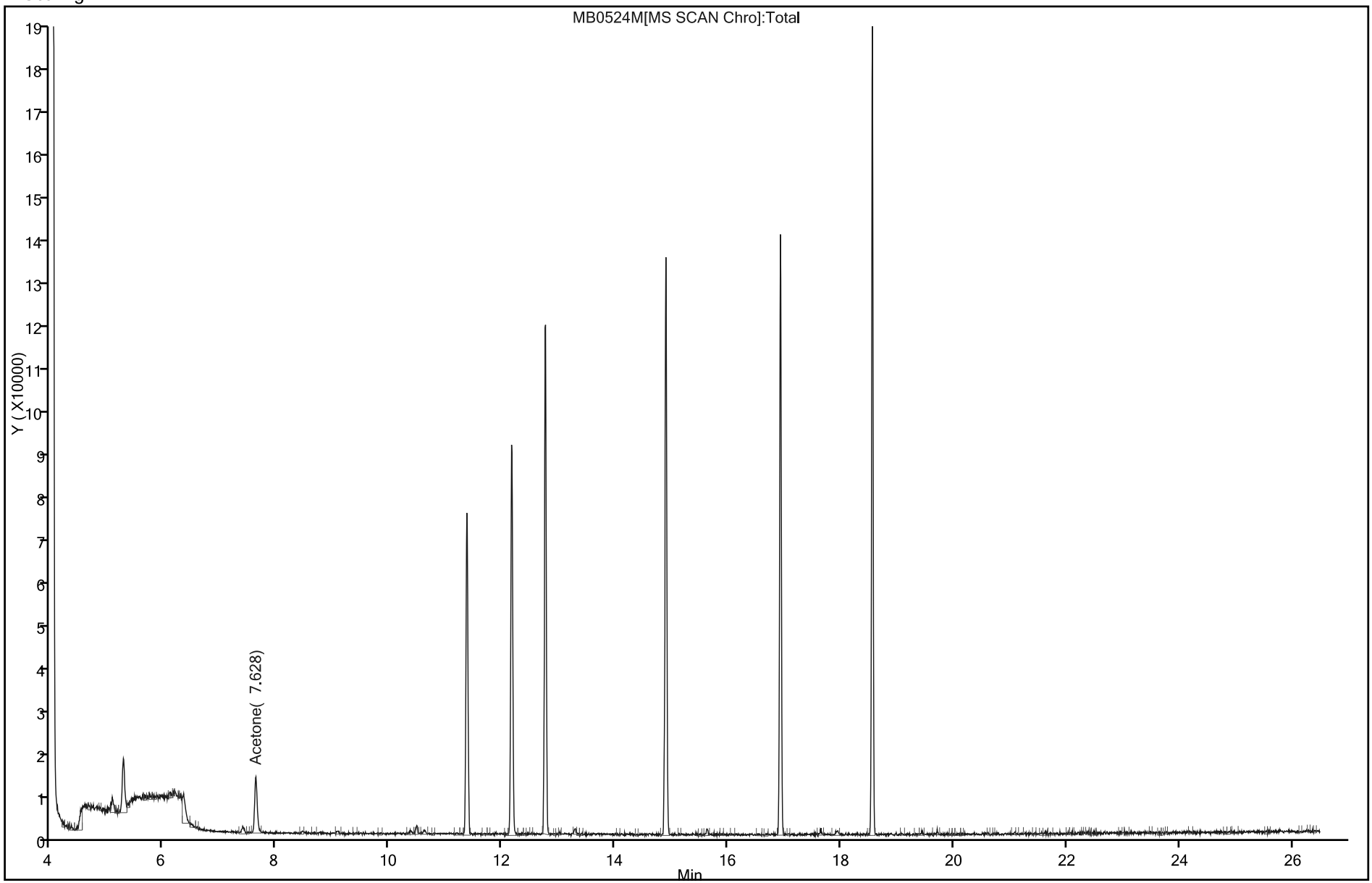
CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	113		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		70-130
2037-26-5	Toluene-d8 (Surr)	92		70-130

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Lachrom\ChromData\MSG\20120524-1181.b\MB0524M.d		
Lims ID:	340-2164-A-1	Client ID:	34000678
Inject. Date:	25-May-2012 04:22:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	340-2164-A-1		
Misc. Info.:	340-0001181-027		
Operator:	DLK	Instrument ID:	MSG
Vol. Injected:	1.0000	ALS Bottle#:	6
Lims Batch ID:	1681	Lims Sample ID:	27
Detector:	MS SCAN		
Method:	\\Lachrom\ChromData\MSG\20120524-1181.b\TO-15_MSG.m		
Method Label:	TO-15/TO-14A		
Last Update:	25-May-2012 09:39:15	Calib Date:	14-May-2012 14:21:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Lachrom\ChromData\MSG\20120512-1108.b\IC05148.d		
Limit Group:	TO-15-TO-15_MOD_ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	CORP-CTX-12		
First Level Reviewer: kammererd		Date:	25-May-2012 09:39:15

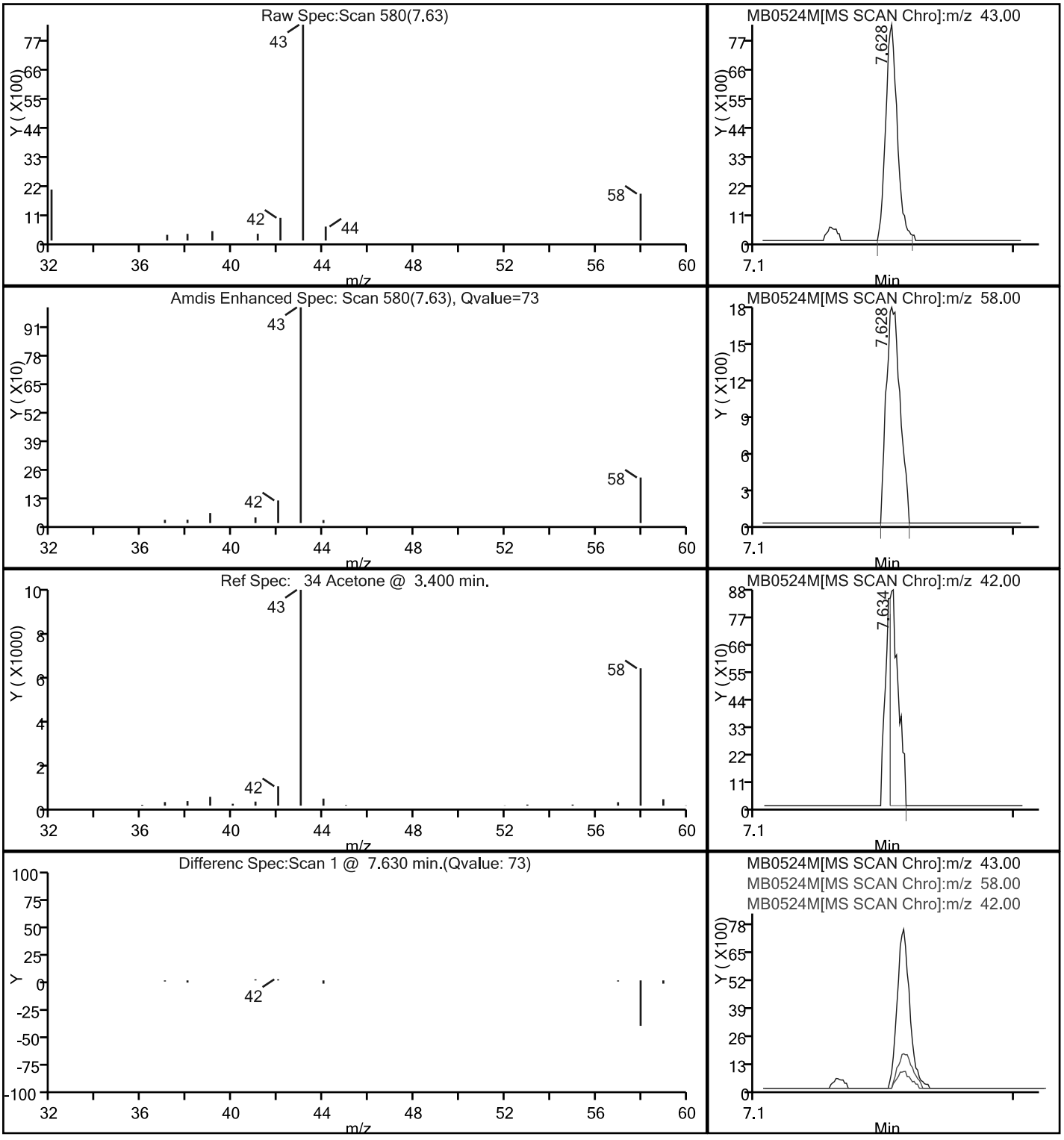
Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ppb v/v	Flags
34 Acetone	43	7.628	7.634	-0.006	73	25800	1.42	
* 57 Chlorobromomethane (IS)	49	11.367	11.379	-0.012	87	51066	4.00	
$ 64 1,2-Dichloroethane-d4 (Surr)	65	12.160	12.179	-0.019	96	61345	4.28	
* 70 1,4-Difluorobenzene	114	12.762	12.768	-0.006	98	73756	4.00	
$ 80 Toluene-d8 (Surr)	98	14.895	14.901	-0.006	92	78643	3.66	
* 89 Chlorobenzene-d5 (IS)	117	16.929	16.935	-0.006	98	62354	4.00	
$ 100 4-Bromofluorobenzene (Surr)	95	18.560	18.566	-0.006	72	59202	4.52	

Report Date: 25-May-2012 09:39:16 Chrom Revision: 2.0 09-Mar-2012 13:24:42
Data File: \\Lachrom\ChromData\MSG\20120524-1181.b\MB0524M.d
Injection Date: 25-May-2012 04:22:30 Limit Group: TO-15-TO-15_MOD_ICAL
Client ID: 34000678 Instrument ID: MSG
Lims Batch ID: 1681 Lims Sample ID: 27
Operator ID: DLK
Column Type: RTX-Volatiles Column Dia: 0.32 mm
Y Scaling:



Report Date: 25-May-2012 09:39:16 Chrom Revision: 2.0 09-Mar-2012 13:24:42
Data File: \\Lachrom\ChromData\MSG\20120524-1181.b\MB0524M.d
Injection Date: 25-May-2012 04:22:30 Limit Group: TO-15-TO-15_MOD_ICAL
Client ID: 34000678 Instrument ID: MSG
Lims Batch ID: 1681 Lims Sample ID: 27
Operator ID: DLK
Column Type: RTX-Volatiles Column Dia: 0.32 mm

34 Acetone



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Costa Mesa
3585 Cadillac Ave
Suite A
Costa Mesa, CA 92626
Tel: (714)258-8610

TestAmerica Job ID: 340-2374-1
Client Project/Site: Sherman Williams

For:
CDM Smith, Inc.
100 Pringle Avenue
Suite 300
Walnut Creek, California 94596

Attn: Pawan Sharma

Beth Riley

Authorized for release by:
6/20/2012 4:48:18 PM

Beth Riley
Customer Service Manager
beth.riley@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Surrogate Summary 8
QC Sample Results 9
QC Association Summary 15
Lab Chronicle 16
Certification Summary 17
Method Summary 18
Sample Summary 19
Chain of Custody 20
Receipt Checklists 21
Field Data Sheets 22
Clean Canister Certification 23
Pre-Ship Certification 23
Clean Canister Data 24

Client: CDM Smith, Inc.
Project/Site: Sherman Williams

TestAmerica Job ID: 340-2374-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 340-2374-1

Laboratory: TestAmerica Costa Mesa

Narrative

Job Narrative
340-2374-1

Receipt
The samples were received on 6/9/2012 9:00 AM; the samples arrived in good condition.

Air - GC VOA
No analytical or quality issues were noted.

Air - GC/MS VOA
No analytical or quality issues were noted.

Detection Summary

Client: CDM Smith, Inc.
Project/Site: Sherman Williams

TestAmerica Job ID: 340-2374-1

Client Sample ID: AMBIENT-20120607

Lab Sample ID: 340-2374-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (FID)	0.046		0.021	0.0041	% v/v	2.07		D1946	Total/NA
Methane (FID)	0.00023	J	0.00041	0.00012	% v/v	2.07		D1946	Total/NA
Nitrogen	75		2.1	1.0	% v/v	2.07		D1946	Total/NA
Oxygen	22		0.41	0.062	% v/v	2.07		D1946	Total/NA
2-Butanone (MEK)	0.65	J	0.80	0.40	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.73	J	0.80	0.20	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.63		0.40	0.15	ppb v/v	1		TO-15	Total/NA
Toluene	0.20	J	0.40	0.20	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.31	J	0.40	0.15	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (FID)	460		210	41	ppm v/v	2.07		D1946	Total/NA
Methane (FID)	2.3	J	4.1	1.2	ppm v/v	2.07		D1946	Total/NA
Nitrogen	750000		21000	10000	ppm v/v	2.07		D1946	Total/NA
Oxygen	220000		4100	620	ppm v/v	2.07		D1946	Total/NA

Client: CDM Smith, Inc.
Project/Site: Sherman Williams

TestAmerica Job ID: 340-2374-1

Client Sample ID: AMBIENT-20120607
Date Collected: 06/07/12 07:48
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 340-2374-1
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	**0.046**		0.021	0.0041	% v/v			06/18/12 14:29	2.07
Helium	ND		0.041	0.021	% v/v			06/18/12 14:29	2.07
Methane (FID)	**0.00023**	**J**	0.00041	0.00012	% v/v			06/18/12 14:29	2.07
Nitrogen	**75**		2.1	1.0	% v/v			06/18/12 14:29	2.07
Oxygen	**22**		0.41	0.062	% v/v			06/18/12 14:29	2.07

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	**460**		210	41	ppm v/v			06/18/12 14:29	2.07
Helium	ND		410	210	ppm v/v			06/18/12 14:29	2.07
Methane (FID)	**2.3**	**J**	4.1	1.2	ppm v/v			06/18/12 14:29	2.07
Nitrogen	**750000**		21000	10000	ppm v/v			06/18/12 14:29	2.07
Oxygen	**220000**		4100	620	ppm v/v			06/18/12 14:29	2.07

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.80	0.30	ppb v/v			06/16/12 03:03	1
Benzene	ND		0.30	0.15	ppb v/v			06/16/12 03:03	1
Benzyl chloride	ND		0.80	0.25	ppb v/v			06/16/12 03:03	1
Bromodichloromethane	ND		0.30	0.15	ppb v/v			06/16/12 03:03	1
Bromoform	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
Bromomethane	ND		0.80	0.20	ppb v/v			06/16/12 03:03	1
2-Butanone (MEK)	**0.65**	**J**	0.80	0.40	ppb v/v			06/16/12 03:03	1
Carbon disulfide	ND		0.80	0.20	ppb v/v			06/16/12 03:03	1
Carbon tetrachloride	ND		0.80	0.25	ppb v/v			06/16/12 03:03	1
Chlorobenzene	ND		0.30	0.10	ppb v/v			06/16/12 03:03	1
Dibromochloromethane	ND		0.40	0.10	ppb v/v			06/16/12 03:03	1
Chloroethane	ND		0.80	0.20	ppb v/v			06/16/12 03:03	1
Chloroform	ND		0.30	0.10	ppb v/v			06/16/12 03:03	1
Chloromethane	**0.73**	**J**	0.80	0.20	ppb v/v			06/16/12 03:03	1
1,2-Dibromoethane (EDB)	ND		0.80	0.20	ppb v/v			06/16/12 03:03	1
1,2-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/16/12 03:03	1
1,3-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/16/12 03:03	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/16/12 03:03	1
Dichlorodifluoromethane	**0.63**		0.40	0.15	ppb v/v			06/16/12 03:03	1
1,1-Dichloroethane	ND		0.30	0.15	ppb v/v			06/16/12 03:03	1
1,2-Dichloroethane	ND		0.80	0.30	ppb v/v			06/16/12 03:03	1
1,1-Dichloroethene	ND		0.80	0.20	ppb v/v			06/16/12 03:03	1
cis-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
trans-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
1,2-Dichloropropane	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
cis-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
trans-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
Ethylbenzene	ND		0.40	0.15	ppb v/v			06/16/12 03:03	1
4-Ethyltoluene	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
Hexachlorobutadiene	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
2-Hexanone	ND		0.40	0.25	ppb v/v			06/16/12 03:03	1
Methylene chloride	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
Styrene	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.10	ppb v/v			06/16/12 03:03	1

Client: CDM Smith, Inc.
Project/Site: Sherman Williams

TestAmerica Job ID: 340-2374-1

Client Sample ID: AMBIENT-20120607
Date Collected: 06/07/12 07:48
Date Received: 06/09/12 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 340-2374-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
Toluene	**0.20**	**J**	0.40	0.20	ppb v/v			06/16/12 03:03	1
1,2,4-Trichlorobenzene	ND		2.5	1.0	ppb v/v			06/16/12 03:03	1
1,1,1-Trichloroethane	ND		0.30	0.15	ppb v/v			06/16/12 03:03	1
1,1,2-Trichloroethane	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
Trichloroethene	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
Trichlorofluoromethane	**0.31**	**J**	0.40	0.15	ppb v/v			06/16/12 03:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1
1,2,4-Trimethylbenzene	ND		2.5	0.25	ppb v/v			06/16/12 03:03	1
1,3,5-Trimethylbenzene	ND		0.40	0.25	ppb v/v			06/16/12 03:03	1
Vinyl acetate	ND		0.80	0.20	ppb v/v			06/16/12 03:03	1
Vinyl chloride	ND		0.20	0.10	ppb v/v			06/16/12 03:03	1
m,p-Xylene	ND		0.80	0.20	ppb v/v			06/16/12 03:03	1
o-Xylene	ND		0.40	0.20	ppb v/v			06/16/12 03:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*06/16/12 03:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*128*		*70 - 130*		*06/16/12 03:03*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*06/16/12 03:03*	*1*

Surrogate Summary

Client: CDM Smith, Inc.
Project/Site: Sherman Williams

TestAmerica Job ID: 340-2374-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		BFB	12DCE	TOL					
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)					
340-2374-1	AMBIENT-20120607	109	128	103					
LCS 340-1837/11	Lab Control Sample	101	107	100					
LCSD 340-1837/12	Lab Control Sample Dup	100	104	99					
MB 340-1837/13	Method Blank	97	102	98					

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Method: D1946 - Fixed Gases in Air (GC)

Lab Sample ID: MB 340-1861/11
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		0.020	0.010	% v/v			06/18/12 14:10	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		200	100	ppm v/v			06/18/12 14:10	1

Lab Sample ID: MB 340-1861/8
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	ND		0.010	0.0020	% v/v			06/18/12 12:55	1
Methane (FID)	ND		0.00020	0.000060	% v/v			06/18/12 12:55	1
Nitrogen	ND		1.0	0.50	% v/v			06/18/12 12:55	1
Oxygen	ND		0.20	0.030	% v/v			06/18/12 12:55	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (FID)	ND		100	20	ppm v/v			06/18/12 12:55	1
Methane (FID)	ND		2.0	0.60	ppm v/v			06/18/12 12:55	1
Nitrogen	ND		10000	5000	ppm v/v			06/18/12 12:55	1
Oxygen	ND		2000	300	ppm v/v			06/18/12 12:55	1

Lab Sample ID: LCS 340-1861/4
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (TCD)	20.0	21.0		% v/v		105	80 - 120
Methane (TCD)	19.8	20.5		% v/v		104	80 - 120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (TCD)	200000	210000		ppm v/v		105	80 - 120
Methane (TCD)	200000	205000		ppm v/v		104	80 - 120

Lab Sample ID: LCS 340-1861/6
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (FID)	0.400	0.418		% v/v		105	80 - 120
Methane (FID)	0.0495	0.0526		% v/v		106	80 - 120
Nitrogen	20.0	20.9		% v/v		105	80 - 120
Oxygen	4.98	5.23		% v/v		105	80 - 120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (FID)	4000	4180		ppm v/v		105	80 - 120
Methane (FID)	500	526		ppm v/v		106	80 - 120
Nitrogen	200000	209000		ppm v/v		105	80 - 120
Oxygen	50000	52300		ppm v/v		105	80 - 120

Method: D1946 - Fixed Gases in Air (GC) (Continued)

Lab Sample ID: LCS 340-1861/9
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Helium	6.25	6.22		% v/v		99	80 - 120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Helium	62000	62200		ppm v/v		99	80 - 120

Lab Sample ID: LCSD 340-1861/10
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Helium	6.25	6.23		% v/v		100	80 - 120	0	20

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Helium	62000	62300		ppm v/v		100	80 - 120	0	20

Lab Sample ID: LCSD 340-1861/5
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon Dioxide (TCD)	20.0	21.0		% v/v		105	80 - 120	0	20
Methane (TCD)	19.8	20.6		% v/v		104	80 - 120	0	20

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon Dioxide (TCD)	200000	210000		ppm v/v		105	80 - 120	0	20
Methane (TCD)	200000	206000		ppm v/v		104	80 - 120	0	20

Lab Sample ID: LCSD 340-1861/7
Matrix: Air
Analysis Batch: 1861

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon Dioxide (FID)	0.400	0.419		% v/v		105	80 - 120	0	20
Methane (FID)	0.0495	0.0526		% v/v		106	80 - 120	0	20
Nitrogen	20.0	20.9		% v/v		105	80 - 120	0	20
Oxygen	4.98	5.21		% v/v		105	80 - 120	0	20

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon Dioxide (FID)	4000	4190		ppm v/v		105	80 - 120	0	20
Methane (FID)	500	526		ppm v/v		106	80 - 120	0	20
Nitrogen	200000	209000		ppm v/v		105	80 - 120	0	20
Oxygen	50000	52100		ppm v/v		105	80 - 120	0	20

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 340-1837/13
Matrix: Air
Analysis Batch: 1837

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.80	0.30	ppb v/v			06/15/12 15:31	1
Benzene	ND		0.30	0.15	ppb v/v			06/15/12 15:31	1
Benzyl chloride	ND		0.80	0.25	ppb v/v			06/15/12 15:31	1
Bromodichloromethane	ND		0.30	0.15	ppb v/v			06/15/12 15:31	1
Bromoform	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
Bromomethane	ND		0.80	0.20	ppb v/v			06/15/12 15:31	1
2-Butanone (MEK)	ND		0.80	0.40	ppb v/v			06/15/12 15:31	1
Carbon disulfide	ND		0.80	0.20	ppb v/v			06/15/12 15:31	1
Carbon tetrachloride	ND		0.80	0.25	ppb v/v			06/15/12 15:31	1
Chlorobenzene	ND		0.30	0.10	ppb v/v			06/15/12 15:31	1
Dibromochloromethane	ND		0.40	0.10	ppb v/v			06/15/12 15:31	1
Chloroethane	ND		0.80	0.20	ppb v/v			06/15/12 15:31	1
Chloroform	ND		0.30	0.10	ppb v/v			06/15/12 15:31	1
Chloromethane	ND		0.80	0.20	ppb v/v			06/15/12 15:31	1
1,2-Dibromoethane (EDB)	ND		0.80	0.20	ppb v/v			06/15/12 15:31	1
1,2-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/15/12 15:31	1
1,3-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/15/12 15:31	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			06/15/12 15:31	1
Dichlorodifluoromethane	ND		0.40	0.15	ppb v/v			06/15/12 15:31	1
1,1-Dichloroethane	ND		0.30	0.15	ppb v/v			06/15/12 15:31	1
1,2-Dichloroethane	ND		0.80	0.30	ppb v/v			06/15/12 15:31	1
1,1-Dichloroethene	ND		0.80	0.20	ppb v/v			06/15/12 15:31	1
cis-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
trans-1,2-Dichloroethene	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
1,2-Dichloropropane	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
cis-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
trans-1,3-Dichloropropene	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
Ethylbenzene	ND		0.40	0.15	ppb v/v			06/15/12 15:31	1
4-Ethyltoluene	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
Hexachlorobutadiene	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
2-Hexanone	ND		0.40	0.25	ppb v/v			06/15/12 15:31	1
Methylene chloride	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
Styrene	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.10	ppb v/v			06/15/12 15:31	1
Tetrachloroethene	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
Toluene	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
1,2,4-Trichlorobenzene	ND		2.5	1.0	ppb v/v			06/15/12 15:31	1
1,1,1-Trichloroethane	ND		0.30	0.15	ppb v/v			06/15/12 15:31	1
1,1,2-Trichloroethane	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
Trichloroethene	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
Trichlorofluoromethane	ND		0.40	0.15	ppb v/v			06/15/12 15:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1
1,2,4-Trimethylbenzene	ND		2.5	0.25	ppb v/v			06/15/12 15:31	1
1,3,5-Trimethylbenzene	ND		0.40	0.25	ppb v/v			06/15/12 15:31	1
Vinyl acetate	ND		0.80	0.20	ppb v/v			06/15/12 15:31	1
Vinyl chloride	ND		0.20	0.10	ppb v/v			06/15/12 15:31	1
m,p-Xylene	ND		0.80	0.20	ppb v/v			06/15/12 15:31	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-1837/13
Matrix: Air
Analysis Batch: 1837

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.40	0.20	ppb v/v			06/15/12 15:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*06/15/12 15:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*06/15/12 15:31*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*06/15/12 15:31*	*1*

Lab Sample ID: LCS 340-1837/11
Matrix: Air
Analysis Batch: 1837

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10.0	10.8		ppb v/v		108	70 - 130
Benzene	10.0	9.97		ppb v/v		100	70 - 130
Benzyl chloride	10.8	10.7		ppb v/v		99	70 - 130
Bromodichloromethane	10.0	10.3		ppb v/v		103	70 - 130
Bromoform	10.0	11.2		ppb v/v		112	70 - 130
Bromomethane	10.0	10.5		ppb v/v		105	70 - 130
2-Butanone (MEK)	10.6	9.23		ppb v/v		87	70 - 130
Carbon disulfide	10.0	11.4		ppb v/v		114	70 - 130
Carbon tetrachloride	10.0	11.6		ppb v/v		116	70 - 130
Chlorobenzene	10.7	9.90		ppb v/v		92	70 - 130
Dibromochloromethane	11.5	10.7		ppb v/v		93	70 - 130
Chloroethane	10.0	11.5		ppb v/v		115	70 - 130
Chloroform	10.0	10.7		ppb v/v		107	70 - 130
Chloromethane	10.0	10.1		ppb v/v		101	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.1		ppb v/v		101	70 - 130
1,2-Dichlorobenzene	10.7	9.55		ppb v/v		89	70 - 130
1,3-Dichlorobenzene	10.8	9.50		ppb v/v		88	70 - 130
1,4-Dichlorobenzene	10.0	9.45		ppb v/v		95	70 - 130
Dichlorodifluoromethane	10.0	10.8		ppb v/v		108	70 - 130
1,1-Dichloroethane	10.0	10.4		ppb v/v		104	70 - 130
1,2-Dichloroethane	10.0	10.2		ppb v/v		102	70 - 130
1,1-Dichloroethene	10.0	10.5		ppb v/v		105	70 - 130
cis-1,2-Dichloroethene	10.0	10.5		ppb v/v		105	70 - 130
trans-1,2-Dichloroethene	10.0	11.0		ppb v/v		110	70 - 130
1,2-Dichloropropane	10.0	9.61		ppb v/v		96	70 - 130
cis-1,3-Dichloropropene	10.6	11.1		ppb v/v		105	70 - 130
trans-1,3-Dichloropropene	10.0	9.66		ppb v/v		97	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	10.6		ppb v/v		106	70 - 130
Ethylbenzene	10.6	10.2		ppb v/v		96	70 - 130
4-Ethyltoluene	10.0	8.64		ppb v/v		86	70 - 130
Hexachlorobutadiene	10.0	10.3		ppb v/v		103	70 - 130
2-Hexanone	10.0	9.58		ppb v/v		96	70 - 130
Methylene chloride	10.0	9.43		ppb v/v		94	70 - 130
4-Methyl-2-pentanone (MIBK)	11.0	9.84		ppb v/v		89	70 - 130
Styrene	10.7	10.3		ppb v/v		96	70 - 130
1,1,2,2-Tetrachloroethane	10.8	9.76		ppb v/v		90	70 - 130
Tetrachloroethene	10.0	9.74		ppb v/v		97	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-1837/11
Matrix: Air
Analysis Batch: 1837

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	10.0	9.91		ppb v/v		99	70 - 130
1,2,4-Trichlorobenzene	10.0	10.2		ppb v/v		102	70 - 130
1,1,1-Trichloroethane	10.0	10.9		ppb v/v		109	70 - 130
1,1,2-Trichloroethane	10.0	10.2		ppb v/v		102	70 - 130
Trichloroethene	10.0	10.1		ppb v/v		101	70 - 130
Trichlorofluoromethane	10.0	10.8		ppb v/v		108	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.9		ppb v/v		109	70 - 130
1,2,4-Trimethylbenzene	10.0	9.16		ppb v/v		92	70 - 130
1,3,5-Trimethylbenzene	10.7	8.99		ppb v/v		84	70 - 130
Vinyl acetate	10.8	10.9		ppb v/v		101	70 - 130
Vinyl chloride	10.0	11.0		ppb v/v		110	70 - 130
m,p-Xylene	20.0	19.9		ppb v/v		100	70 - 130
o-Xylene	10.8	9.79		ppb v/v		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 340-1837/12
Matrix: Air
Analysis Batch: 1837

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	10.0	10.8		ppb v/v		108	70 - 130	0	25
Benzene	10.0	10.2		ppb v/v		102	70 - 130	2	25
Benzyl chloride	10.8	10.7		ppb v/v		99	70 - 130	0	25
Bromodichloromethane	10.0	10.3		ppb v/v		103	70 - 130	1	25
Bromoform	10.0	11.3		ppb v/v		113	70 - 130	1	25
Bromomethane	10.0	10.7		ppb v/v		107	70 - 130	2	25
2-Butanone (MEK)	10.6	9.48		ppb v/v		89	70 - 130	3	25
Carbon disulfide	10.0	11.5		ppb v/v		115	70 - 130	1	25
Carbon tetrachloride	10.0	11.6		ppb v/v		116	70 - 130	0	25
Chlorobenzene	10.7	10.1		ppb v/v		95	70 - 130	2	25
Dibromochloromethane	11.5	10.8		ppb v/v		94	70 - 130	2	25
Chloroethane	10.0	11.4		ppb v/v		114	70 - 130	0	25
Chloroform	10.0	10.6		ppb v/v		106	70 - 130	0	25
Chloromethane	10.0	10.1		ppb v/v		101	70 - 130	1	25
1,2-Dibromoethane (EDB)	10.0	10.3		ppb v/v		103	70 - 130	2	25
1,2-Dichlorobenzene	10.7	9.66		ppb v/v		90	70 - 130	1	25
1,3-Dichlorobenzene	10.8	9.71		ppb v/v		90	70 - 130	2	25
1,4-Dichlorobenzene	10.0	9.59		ppb v/v		96	70 - 130	1	25
Dichlorodifluoromethane	10.0	10.6		ppb v/v		106	70 - 130	2	25
1,1-Dichloroethane	10.0	10.5		ppb v/v		105	70 - 130	1	25
1,2-Dichloroethane	10.0	10.1		ppb v/v		101	70 - 130	1	25
1,1-Dichloroethene	10.0	10.5		ppb v/v		105	70 - 130	0	25
cis-1,2-Dichloroethene	10.0	10.7		ppb v/v		107	70 - 130	2	25
trans-1,2-Dichloroethene	10.0	11.0		ppb v/v		110	70 - 130	1	25
1,2-Dichloropropane	10.0	9.90		ppb v/v		99	70 - 130	3	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-1837/12
Matrix: Air
Analysis Batch: 1837

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene			10.6	11.3		ppb v/v		107	70 - 130	2	25
trans-1,3-Dichloropropene			10.0	9.53		ppb v/v		95	70 - 130	1	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane			10.0	10.4		ppb v/v		104	70 - 130	2	25
Ethylbenzene			10.6	10.4		ppb v/v		98	70 - 130	2	25
4-Ethyltoluene			10.0	8.68		ppb v/v		87	70 - 130	0	25
Hexachlorobutadiene			10.0	10.4		ppb v/v		104	70 - 130	1	25
2-Hexanone			10.0	9.97		ppb v/v		100	70 - 130	4	25
Methylene chloride			10.0	9.54		ppb v/v		95	70 - 130	1	25
4-Methyl-2-pentanone (MIBK)			11.0	9.90		ppb v/v		90	70 - 130	1	25
Styrene			10.7	10.5		ppb v/v		98	70 - 130	2	25
1,1,2,2-Tetrachloroethane			10.8	9.94		ppb v/v		92	70 - 130	2	25
Tetrachloroethene			10.0	9.93		ppb v/v		99	70 - 130	2	25
Toluene			10.0	10.2		ppb v/v		102	70 - 130	3	25
1,2,4-Trichlorobenzene			10.0	10.3		ppb v/v		103	70 - 130	1	25
1,1,1-Trichloroethane			10.0	10.8		ppb v/v		108	70 - 130	1	25
1,1,2-Trichloroethane			10.0	10.3		ppb v/v		103	70 - 130	1	25
Trichloroethene			10.0	10.2		ppb v/v		102	70 - 130	2	25
Trichlorofluoromethane			10.0	10.6		ppb v/v		106	70 - 130	2	25
1,1,2-Trichloro-1,2,2-trifluoroethane			10.0	11.1		ppb v/v		111	70 - 130	2	25
1,2,4-Trimethylbenzene			10.0	9.21		ppb v/v		92	70 - 130	1	25
1,3,5-Trimethylbenzene			10.7	9.23		ppb v/v		86	70 - 130	3	25
Vinyl acetate			10.8	11.0		ppb v/v		102	70 - 130	1	25
Vinyl chloride			10.0	11.1		ppb v/v		111	70 - 130	1	25
m,p-Xylene			20.0	20.3		ppb v/v		101	70 - 130	2	25
o-Xylene			10.8	9.93		ppb v/v		92	70 - 130	1	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Sherman Williams

TestAmerica Job ID: 340-2374-1

GC VOA

Analysis Batch: 1861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
340-2374-1	AMBIENT-20120607	Total/NA	Air	D1946	
LCS 340-1861/4	Lab Control Sample	Total/NA	Air	D1946	
LCS 340-1861/6	Lab Control Sample	Total/NA	Air	D1946	
LCS 340-1861/9	Lab Control Sample	Total/NA	Air	D1946	
LCSD 340-1861/10	Lab Control Sample Dup	Total/NA	Air	D1946	
LCSD 340-1861/5	Lab Control Sample Dup	Total/NA	Air	D1946	
LCSD 340-1861/7	Lab Control Sample Dup	Total/NA	Air	D1946	
MB 340-1861/11	Method Blank	Total/NA	Air	D1946	
MB 340-1861/8	Method Blank	Total/NA	Air	D1946	

Air - GC/MS VOA

Analysis Batch: 1837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
340-2374-1	AMBIENT-20120607	Total/NA	Air	TO-15	
LCS 340-1837/11	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 340-1837/12	Lab Control Sample Dup	Total/NA	Air	TO-15	
MB 340-1837/13	Method Blank	Total/NA	Air	TO-15	

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Sherman Williams

TestAmerica Job ID: 340-2374-1

Client Sample ID: AMBIENT-20120607

Lab Sample ID: 340-2374-1

Date Collected: 06/07/12 07:48

Matrix: Air

Date Received: 06/09/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.07	1861	06/18/12 14:29	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		1	1837	06/16/12 03:03	DLK	TAL LA
	Instrument ID: MSG							

Laboratory References:

TAL LA = TestAmerica Costa Mesa, 3585 Cadillac Ave, Suite A, Costa Mesa, CA 92626, TEL (714)258-8610

Certification Summary

Client: CDM Smith, Inc.
Project/Site: Sherman Williams

TestAmerica Job ID: 340-2374-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Costa Mesa	Arizona	State Program	9	AZ0727
TestAmerica Costa Mesa	Florida	NELAC	4	E87652
TestAmerica Costa Mesa	L-A-B	DoD ELAP		L2273
TestAmerica Costa Mesa	Louisiana	NELAC	6	01948
TestAmerica Costa Mesa	New York	NELAC	2	11851
TestAmerica Costa Mesa	Oregon	NELAC	10	CA200013
TestAmerica Costa Mesa	Washington	State Program	10	C579

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: CDM Smith, Inc.
Project/Site: Sherman Williams

TestAmerica Job ID: 340-2374-1

Method	Method Description	Protocol	Laboratory
D1946	Fixed Gases in Air (GC)	ASTM	TAL LA
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL LA

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

Laboratory References:

TAL LA = TestAmerica Costa Mesa, 3585 Cadillac Ave, Suite A, Costa Mesa, CA 92626, TEL (714)258-8610

Sample Summary

Client: CDM Smith, Inc.
Project/Site: Sherman Williams

TestAmerica Job ID: 340-2374-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
340-2374-1	AMBIENT-20120607	Air	06/07/12 07:48	06/09/12 09:00

TestAmerica
3585 Cadillac Ave., Suite A
Costa Mesa, CA 92626
Phone 714-258-8610 Fax 714-258-0921

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information	Project Manager: Pawan Sharma	340-23724	1 of 1 COCs
Company: CDM Smith	Phone: 9259332900	Samples Collected By: S. Mysel	
Address: 100 Pringle Ave, Suite 300	Email: sharmapk@cdmsmith.com		
City/State/Zip: Walnut Creek, CA 94596	Site Contact: Pawan Sharma		
Phone: 925 933 2900	LAB Contact: Beth Riley		
FAX:	Analysis Turnaround Time		
Project Name: Sherwin Williams	Standard (Specify) 14 days		
Site: Emeryville, CA	Rush (Specify)		
PO # 13452-92207-TK29.SG1			

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	TO-3	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
~~AMBIENT-20120607~~																				
AMBIENT-20120607	6/8/12	0748	1526	-30	-5	08092	3400/440	X					X				X			

Temperature (Fahrenheit)			
	Interior	Ambient	
Start			
Stop			

Pressure (inches of Hg)			
	Interior	Ambient	
Start			
Stop			

Special Instructions/QC Requirements & Comments:

ASTM D-1946 Special Report helium, oxygen, carbon dioxide, methane

Samples Shipped by: S. Mysel	Date/Time: 06/08/2012 0900	Samples Received by:
Samples Relinquished by: S. Mysel	Date/Time: 06/08/2012 0900	Received by:
Relinquished by:	Date/Time: 6/9/12 0900	Received by:

Lab Use Only Shipper Name: Opened by: Condition:

TAL-8604-340(0312)

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 340-2374-1

Login Number: 2374

List Source: TestAmerica Costa Mesa

List Number: 1

Creator: Gonzales, Steve

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: CDM

CANISTER SERIAL #: 34001440

DATE CLEANED: 340-2067

CLIENT SAMPLE #:

SITE LOCATION:

VFR ID: 08092

Duration of comp. : 8 (Hrs.) / ~~mins.~~

Flow setting: 9.9-10.4 ml/min

Initials:

READING	TIME	Vac. (Inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	5/25/12	
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / (PSIA) (circle unit used))	1198	6.11.2012	AD
FINAL PRESSURE (PSIA)	24.84	6.11.2012	AD

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

CANISTER QC CERTIFICATION

TestAmerica

Certification Type: TO-15

Date Cleaned/Batch: C051712B 340-2067

Date of QC: 05-20-12

Data File Number: MB052203(MSA)

CANISTER ID NUMBERS

*34000445	34001440
0459	0181
0777	0024
0029	1533
0191	0413
1040	1584

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

Reviewed By:

Date: 05-21-12

N:\Sample Control\DOCs\Can QC Cert - Generic - 20110804.doc

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-2067-1

SDG No.:

Client Sample ID: 34000445 Lab Sample ID: 340-2067-1

Matrix: Air Lab File ID: MB05203.d

Analysis Method: TO-15 Date Collected: 05/17/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/20/2012 17:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1648 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.37	J B	0.80	0.30
107-02-8	Acrolein	ND		4.0	2.0
107-13-1	Acrylonitrile	ND		2.0	0.50
107-05-1	Allyl chloride	ND		0.50	0.25
71-43-2	Benzene	ND		0.30	0.15
100-44-7	Benzyl chloride	ND		0.80	0.25
75-27-4	Bromodichloromethane	ND		0.30	0.15
75-25-2	Bromoform	ND		0.40	0.20
74-83-9	Bromomethane	ND		0.80	0.20
106-99-0	1,3-Butadiene	ND		0.80	0.40
106-97-8	n-Butane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		0.80	0.40
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.80
104-51-8	n-Butylbenzene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
98-06-6	tert-Butylbenzene	ND		0.80	0.40
75-15-0	Carbon disulfide	ND		0.80	0.20
56-23-5	Carbon tetrachloride	ND		0.80	0.25
75-00-3	Chloroethane	ND		0.80	0.20
108-90-7	Chlorobenzene	ND		0.30	0.10
75-45-6	Chlorodifluoromethane	ND		1.0	0.40
67-66-3	Chloroform	ND		0.30	0.10
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.50	0.25
110-82-7	Cyclohexane	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.40	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.20
74-95-3	Dibromomethane	ND		0.40	0.20
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroeth ane	ND		0.40	0.20
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.15
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.15
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.15
107-06-2	1,2-Dichloroethane	ND		0.80	0.30

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-2067-1

SDG No.:

Client Sample ID: 34000445 Lab Sample ID: 340-2067-1

Matrix: Air Lab File ID: MB05203.d

Analysis Method: TO-15 Date Collected: 05/17/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/20/2012 17:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1648 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.20
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.20
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.20
78-87-5	1,2-Dichloropropane	ND		0.40	0.20
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.20
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.20
123-91-1	1,4-Dioxane	ND		0.80	0.40
141-78-6	Ethyl acetate	ND	*	0.30	0.15
100-41-4	Ethylbenzene	ND		0.40	0.15
622-96-8	4-Ethyltoluene	ND		0.40	0.20
142-82-5	n-Heptane	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND		0.40	0.20
110-54-3	n-Hexane	ND		1.0	0.40
591-78-6	2-Hexanone	ND		0.40	0.25
98-82-8	Isopropylbenzene	ND		0.80	0.25
99-87-6	4-Isopropyltoluene	ND		0.80	0.25
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.30
80-62-6	Methyl methacrylate	ND		0.40	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20
75-09-2	Methylene chloride	ND		0.40	0.20
98-83-9	alpha-Methylstyrene	ND		0.40	0.15
91-20-3	Naphthalene	ND		2.0	0.80
111-65-9	n-Octane	ND		0.40	0.15
109-66-0	n-Pentane	ND		1.0	0.30
115-07-1	Propylene	ND		1.0	0.50
103-65-1	n-Propylbenzene	ND		0.50	0.20
100-42-5	Styrene	ND		0.40	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.10
127-18-4	Tetrachloroethene	ND		0.40	0.20
109-99-9	Tetrahydrofuran	ND		2.0	0.50
108-88-3	Toluene	ND		0.40	0.20
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		0.40	0.20
120-82-1	1,2,4-Trichlorobenzene	ND		2.5	1.0
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.15
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-2067-1

SDG No.:

Client Sample ID: 34000445 Lab Sample ID: 340-2067-1

Matrix: Air Lab File ID: MB05203.d

Analysis Method: TO-15 Date Collected: 05/17/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/20/2012 17:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 1648 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.20
75-69-4	Trichlorofluoromethane	ND		0.40	0.15
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.20
95-63-6	1,2,4-Trimethylbenzene	ND		2.5	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.25
540-84-1	2,2,4-Trimethylpentane	ND		0.50	0.20
108-05-4	Vinyl acetate	ND		0.80	0.20
593-60-2	Vinyl bromide	ND		0.40	0.20
75-01-4	Vinyl chloride	ND		0.20	0.10
179601-23-1	m,p-Xylene	ND		0.80	0.20
95-47-6	o-Xylene	ND		0.40	0.20

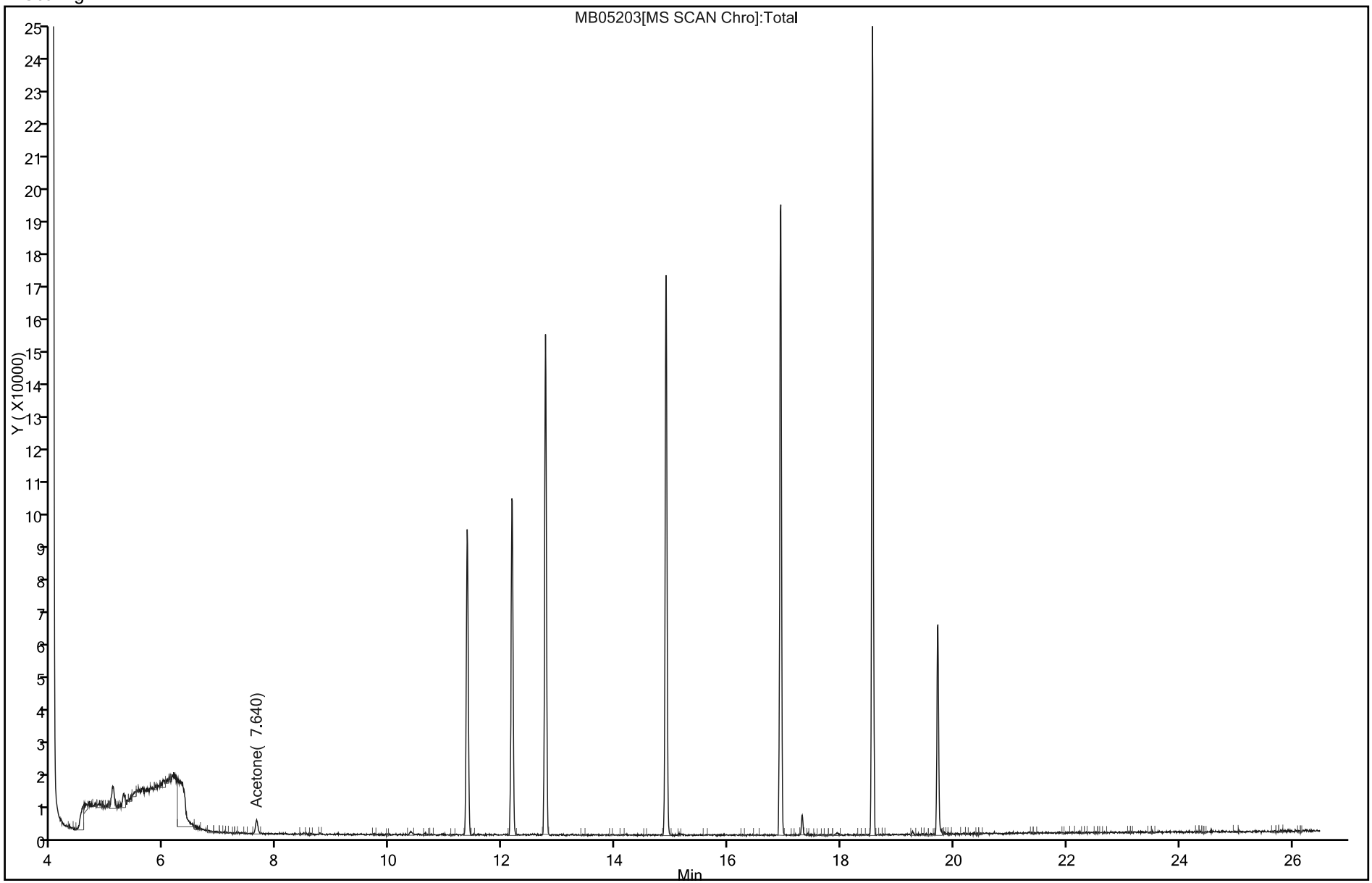
CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-130
2037-26-5	Toluene-d8 (Surr)	92		70-130

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Lachrom\ChromData\MSG\20120520-1157.b\MB05203.d		
Lims ID:	340-2067-A-1	Client ID:	34000445
Inject. Date:	20-May-2012 17:31:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	340-2067-A-1		
Misc. Info.:	340-0001157-015		
Operator:	DLK	Instrument ID:	MSG
Vol. Injected:	1.0000	ALS Bottle#:	6
Lims Batch ID:	1648	Lims Sample ID:	15
Detector:	MS SCAN		
Method:	\\Lachrom\ChromData\MSG\20120520-1157.b\TO-15_MSG.m		
Method Label:	TO-15/TO-14A		
Last Update:	21-May-2012 10:15:04	Calib Date:	14-May-2012 14:21:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Lachrom\ChromData\MSG\20120512-1108.b\IC05148.d		
Limit Group:	TO-15-TO-15_MOD_ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	CORP-CTX-12		
First Level Reviewer: kammererd		Date:	21-May-2012 10:15:04

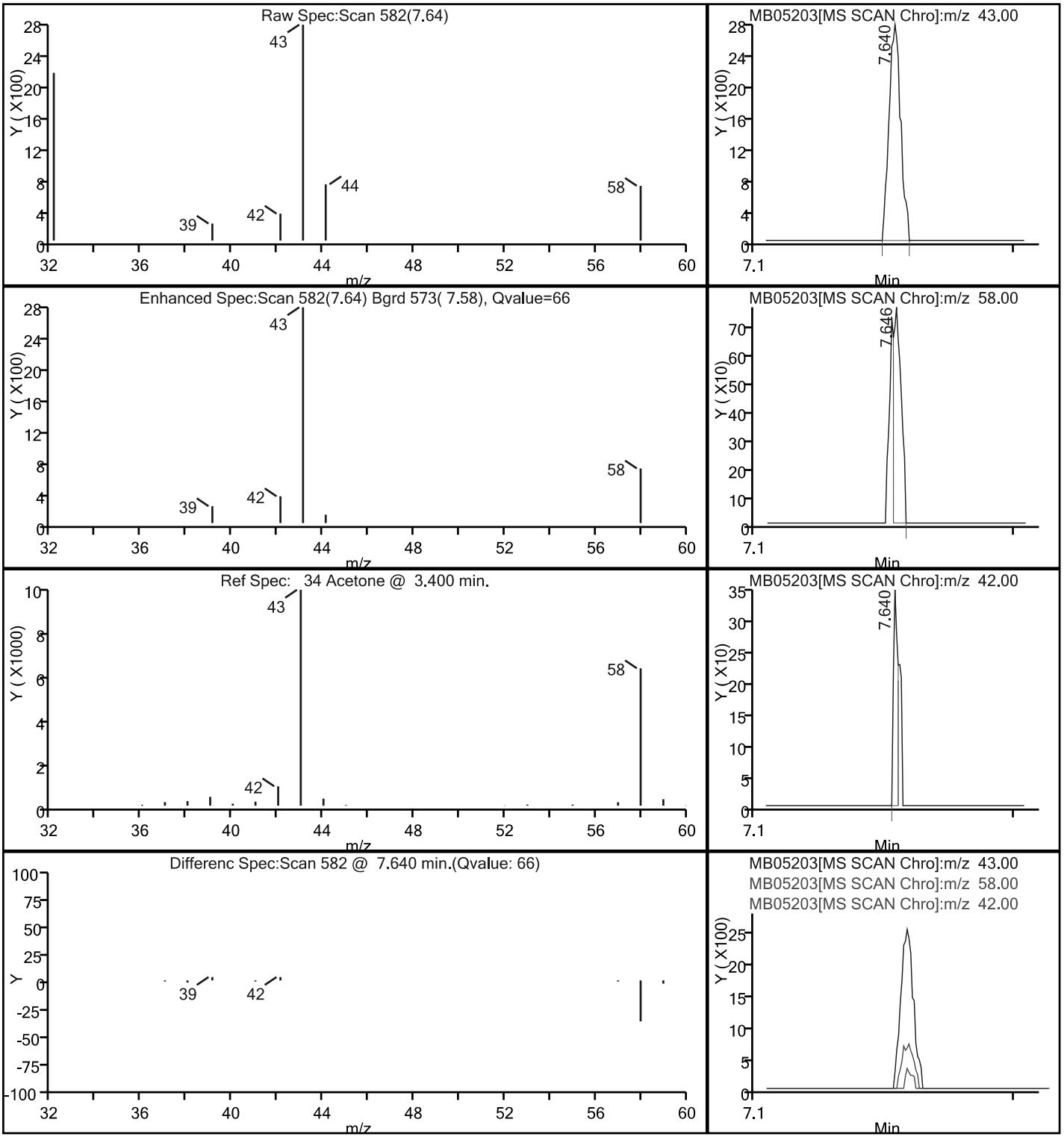
Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ppb v/v	Flags
34 Acetone	43	7.640	7.634	0.006	66	8585	0.3737	
* 57 Chlorobromomethane (IS)	49	11.373	11.385	-0.012	91	64737	4.00	
$ 64 1,2-Dichloroethane-d4 (Surr)	65	12.167	12.179	-0.012	98	70040	3.85	
* 70 1,4-Difluorobenzene	114	12.762	12.774	-0.012	98	112646	4.00	
$ 80 Toluene-d8 (Surr)	98	14.901	14.907	-0.006	94	121271	3.70	
* 89 Chlorobenzene-d5 (IS)	117	16.935	16.941	-0.006	95	103079	4.00	
$ 100 4-Bromofluorobenzene (Surr)	95	18.560	18.566	-0.006	74	89719	4.14	

Report Date: 21-May-2012 10:15:05 Chrom Revision: 2.0 09-Mar-2012 13:24:42
Data File: \\Lachrom\ChromData\MSG\20120520-1157.b\MB05203.d
Injection Date: 20-May-2012 17:31:30 Limit Group: TO-15-TO-15_MOD_ICAL
Client ID: 34000445 Instrument ID: MSG
Lims Batch ID: 1648 Lims Sample ID: 15
Operator ID: DLK
Column Type: RTX-Volatiles Column Dia: 0.32 mm
Y Scaling:



Report Date: 21-May-2012 10:15:05 Chrom Revision: 2.0 09-Mar-2012 13:24:42
Data File: \\Lachrom\ChromData\MSG\20120520-1157.b\MB05203.d
Injection Date: 20-May-2012 17:31:30 Limit Group: TO-15-TO-15_MOD_ICAL
Client ID: 34000445 Instrument ID: MSG
Lims Batch ID: 1648 Lims Sample ID: 15
Operator ID: DLK
Column Type: RTX-Volatiles Column Dia: 0.32 mm

34 Acetone



McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/17/13-01/18/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Reported: 01/30/13
Walnut Creek, CA 94596	Client P.O.:	Date Completed: 01/30/13

WorkOrder: 1301458

February 13, 2013

Dear Dawan:

Enclosed within are:

1) The results of the **12** analyzed samples from your project: **#13452-92207.TK29.SG2; Sherwin Williams,**
2) QC data for the above samples, and
3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,



Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

1301458

McCAMPBELL ANALYTICAL INC.
1534 WILLOW PASS ROAD / PITTSBURG, CA 94565-1701
Website: www.mccampbell.com / Email: main@mccampbell.com
Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY Standard

EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Pawan Sharma Bill To: Pawan Sharma

Company: CDM Smith

E-Mail: sharmapk@cdmsmith.com

Tele: (925) 933 2900 Fax: ( )

Project #: 13452-002.07.TK29.SG2 Project Name: Sherwin Williams

Project Location: Emeryville, CA

Sampler Signature: [signature]

Lab Use Only

Pressurized By	Date	Pressurization Gas N2	Pressurization Gas He

Helium Shroud SN#: USED SUBCONTRACTOR'S SHROUD

Other:

Notes: ASTMD-1946 Special report for helium, carbon dioxide, methane

Field Sample ID (Location)	Collection Date	Collection Time	Canister SN#	Manifold / Sampler Kit SN#	Analysis Requested	~~Indoor~~ Air Outdoor	Soil Gas	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
SGMP-07-20130117	01/17/13	1115	CAN 7518-866	MAN316-819	TO-15, ASTMD1946		X	-30	-5		
SGMP-03-20130117		1225	CAN6309-789	MAN316-681				-30	-5		
SGMP-01-20130117		1335	CAN6167-753	MAN316-821				-28	-5		
SGMP-09-20130117		1421	CAN6419-850	MAN316T-997				-30	-5		
SGMP-04-20130117		1538	CAN6421-852	MAN316-765				-29	-5		
SGMP-05-20130117		1610	CAN 7523-871	MAN316T-774				-29.5	-5		
SGMP-06-20130118	01/18/13	0830	CAN6308-788	MAN316T-777				-28.5	-3		
SGMP-10-20130118		0931	CAN7530-878	MAN316-667				-30	-5		
SGMP-100-20130118		0954	CAN6406-793	MAN316-667				-30	-5		
SGMP-11-20130118		1035	CAN6310-790	MAN316T-778				-30	-5		

Relinquished By:	Date:	Time:	Received By:
[signature]	1/18/13	1715	[signature] 1/18/13 17:15
[signature]	1/18/13	18:50	[signature]

Temp (°C): _____ Work Order #: _____

Equipment Condition: _____

Shipped Via: _____

McCAMPBELL ANALYTICAL INC.

1534 WILLOW PASS ROAD / PITTSBURG, CA 94565-1701
Website: www.mccampbell.com / Email: main@mccampbell.com
Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY
STANDARD
EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Pawan Sharma Bill To: Pawan Sharma
Company: CDM Smith
E-Mail: sharmapk@cdmsmith.com
Tele: (928 933 2900 Fax: ( )
Project #: 13452-92207.TK29.SG2 Project Name: Sherwin Williams
Project Location: Emeryville, CA
Sampler Signature: Skip Mysel

Lab Use Only

Pressurized By	Date	Pressurization Gas N2	Pressurization Gas He

Helium Shroud SN#: USED SUBCONTRACTOR's SHROUD
Other:
Notes: ASTM D-1946 Special report helium, carbon dioxide, methane

Field Sample ID (Location)	Collection Date	Collection Time	Canister SN#	Manifold / Sampler Kit SN#	Analysis Requested	~~Indoor~~ Air Outdoor	Soil Gas	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	Canister Pressure/Vacuum Receipt	Canister Pressure/Vacuum Final (psi)
SG-MP-12-20130118	1/18/2013	1119	CAN5807-738	MAN3167-993	TO-15, ASTM D-1946		X	-30	-5		
TB-20130118	1	1200	CAN7516-864	-	1		1	-	-		

Relinquished By:	Date:	Time:	Received By:
	1/19/13	1715	1/18/13 17:15
Relinquished By:	Date: 1/18/13	Time: 18:50	Received By:
Relinquished By:	Date:	Time:	Received By:

Temp (°C): _____ Work Order #: _____
Equipment Condition: _____
Shipped Via: _____

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1301458 **ClientCode: CDM**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Dawan Sharma
CDM Smith
100 Pringle Avenue Ste. 300
Walnut Creek, CA 94596
(925) 933- 2900 FAX: (925) 933-4174

Email: sharmapk@cdm.com
cc:
PO:
ProjectNo: #13452-92207.TK29.SG2; Sherwin Williams

Bill to:
Michael Zafer
CDM Smith
100 Pringle Avenue Ste. 300
Walnut Creek, CA 94596
SEND HARCOPY

Requested TAT: 5 days

Date Received: **01/18/2013**
Date Printed: **01/18/2013**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1301458-001	SGMP-07-20130117	Soil Gas	1/17/2013 11:15	☐	A	A										
1301458-002	SGMP-03-20130117	Soil Gas	1/17/2013 12:25	☐	A	A										
1301458-003	SGMP-01-20130117	Soil Gas	1/17/2013 13:35	☐	A	A										
1301458-004	SGMP-09-20130117	Soil Gas	1/17/2013 14:21	☐	A	A										
1301458-005	SGMP-04-20130117	Soil Gas	1/17/2013 15:28	☐	A	A										
1301458-006	SGMP-05-20130117	Soil Gas	1/17/2013 16:10	☐	A	A										
1301458-007	SGMP-06-20130118	Soil Gas	1/18/2013 8:20	☐	A	A										
1301458-008	SGMP-10-20130118	Soil Gas	1/18/2013 9:31	☐	A	A										
1301458-009	SGMP-100-20130118	Soil Gas	1/18/2013 9:54	☐	A	A										
1301458-010	SGMP-11-20130118	Soil Gas	1/18/2013 10:35	☐	A	A										
1301458-011	SGMP-12-20130118	Soil Gas	1/18/2013 11:19	☐	A	A										
1301458-012	TB-20130118	Soil Gas	1/18/2013 12:00	☐	A	A										

Test Legend:

1	TMOSPHERICGAS_SG(UL/I	2	TO15_SOIL(UG/M3)	3		4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A contain testgroup.

Prepared by: Zoraida Cortez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name: **CDM Smith**

Date and Time Received: **1/18/2013 9:24:15 PM**

Project Name: **#13452-92207.TK29.SG2; Sherwin Williams**

LogIn Reviewed by: Zoraida Cortez

WorkOrder N°: **1301458** Matrix: Soil Gas

Carrier: Courier

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp:		NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☐	No ☑	

** NOTE: If the "No" box is checked, see comments below.*

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith 100 Pringle Avenue Ste. 300 Walnut Creek, CA 94596	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/17/13
		Date Received: 01/18/13
	Client Contact: Dawan Sharma	Date Reported: 01/29/13
	Client P.O.:	Date Completed: 01/29/13

Work Order: 1301458

January 29, 2013

CASE NARRATIVE REGARDING TO-15 ANALYSIS

All summa canisters are EVACUATED 5 days after the reporting of the results. Please call or email if a longer retention time is required.

In an effort to attain the lowest reporting limits possible for the majority of the TO-15 target list, high level compounds may be analyzed using EPA Method 8260B.

Polymer (Tedlar) bags are not recommended for TO15 samples. The disadvantages are listed in Appendix B of the DTSC Advisory of April 2012.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith 100 Pringle Avenue Ste. 300 Walnut Creek, CA 94596	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/17/13-01/18/13
		Date Received: 01/18/13
	Client Contact: Dawan Sharma	Date Extracted: 01/25/13-01/28/13
	Client P.O.:	Date Analyzed: 01/25/13-01/28/13

Light Gases, Atmospheric*

Extraction Method: ASTM D 1946-90 Analytical Method: ASTM D 1946-90 Work Order: 1301458

Lab ID	1301458-001A	1301458-002A	1301458-003A	1301458-004A	Reporting Limit for DF =1 and Pressure Ratio (Final/Initial) = 2	
Client ID	SGMP-07-20130117	SGMP-03-20130117	SGMP-01-20130117	SGMP-09-20130117		
Matrix	Soil Gas	Soil Gas	Soil Gas	Soil Gas		
Initial Pressure (psia)	12.58	12.64	12.05	6.03		
Final Pressure (psia)	25.10	25.21	24.00	16.02		
DF	100	200	1	1	Soil Gas	W
Compound	**Concentration**				µL/L	ug/L
Carbon Dioxide	110,000	78,000	75	240	20	NA
Methane	84,000	330,000	ND	10	2.0	NA
Surrogate Recoveries (%)						
%SS:	N/A	N/A	N/A	N/A		
Comments						

* vapor samples are reported in µL/L.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith 100 Pringle Avenue Ste. 300 Walnut Creek, CA 94596	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/17/13-01/18/13
		Date Received: 01/18/13
	Client Contact: Dawan Sharma	Date Extracted: 01/25/13-01/28/13
	Client P.O.:	Date Analyzed: 01/25/13-01/28/13

Light Gases, Atmospheric*

Extraction Method: ASTM D 1946-90 | Analytical Method: ASTM D 1946-90 | Work Order: 1301458

Lab ID	1301458-005A	1301458-006A	1301458-007A	1301458-008A	Reporting Limit for DF =1 and Pressure Ratio (Final/Initial) = 2	
Client ID	SGMP-04-20130117	SGMP-05-20130117	SGMP-06-20130118	SGMP-10-20130118		
Matrix	Soil Gas	Soil Gas	Soil Gas	Soil Gas		
Initial Pressure (psia)	12.03	12.12	13.62	13.27		
Final Pressure (psia)	23.98	24.18	27.15	26.44		
DF	1	5	100	1	Soil Gas	W
Compound	**Concentration**				µL/L	ug/L
Carbon Dioxide	42,000	110,000	86,000	100,000	20	NA
Methane	49	2800	190,000	820	2.0	NA
Surrogate Recoveries (%)						
%SS:	N/A	N/A	N/A	N/A		
Comments						

* vapor samples are reported in µL/L.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith 100 Pringle Avenue Ste. 300 Walnut Creek, CA 94596	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/17/13-01/18/13
		Date Received: 01/18/13
	Client Contact: Dawan Sharma	Date Extracted: 01/25/13-01/28/13
	Client P.O.:	Date Analyzed: 01/25/13-01/28/13

Light Gases, Atmospheric*

Extraction Method: ASTM D 1946-90 Analytical Method: ASTM D 1946-90 Work Order: 1301458

Lab ID	1301458-009A	1301458-010A	1301458-011A	1301458-012A	Reporting Limit for DF =1 and Pressure Ratio (Final/Initial) = 2	
Client ID	SGMP-100-20130118	SGMP-11-20130118	SGMP-12-20130118	TB-20130118		
Matrix	Soil Gas	Soil Gas	Soil Gas	Soil Gas		
Initial Pressure (psia)	13.28	13.46	12.53	1.00		
Final Pressure (psia)	26.46	26.83	24.97	2.00		
DF	1	5	10	1	Soil Gas	W
Compound	**Concentration**				µL/L	ug/L
Carbon Dioxide	110,000	60,000	250,000	21	20	NA
Methane	890	1700	3300	ND	2.0	NA
Surrogate Recoveries (%)						
%SS:	N/A	N/A	N/A	N/A		
Comments						

* vapor samples are reported in µL/L.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/17/13-01/18/13
100 Pringle Avenue Ste. 300		Date Received: 01/18/13
	Client Contact: Dawan Sharma	Date Extracted: 01/22/13-01/23/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/22/13-01/23/13

Helium*

Extraction method: ASTM D 1946-90 Analytical methods: ASTM D 1946-90 Work Order: 1301458

Lab ID	Client ID	Matrix	Initial Pressure	Final Pressure	Helium	DF	% SS	Comments
001A	SGMP-07-20130117	Soil Gas	12.58	25.10	ND	1	N/A	
002A	SGMP-03-20130117	Soil Gas	12.64	25.21	ND	1	N/A	
003A	SGMP-01-20130117	Soil Gas	12.05	24.00	0.023	1	N/A	
004A	SGMP-09-20130117	Soil Gas	6.03	16.02	ND<0.0066	1	N/A	a21
005A	SGMP-04-20130117	Soil Gas	12.03	23.98	0.38	1	N/A	
006A	SGMP-05-20130117	Soil Gas	12.12	24.18	ND	1	N/A	
007A	SGMP-06-20130118	Soil Gas	13.62	27.15	ND	1	N/A	
008A	SGMP-10-20130118	Soil Gas	13.27	26.44	ND	1	N/A	
009A	SGMP-100-20130118	Soil Gas	13.28	26.46	ND	1	N/A	
010A	SGMP-11-20130118	Soil Gas	13.46	26.83	ND	1	N/A	
011A	SGMP-12-20130118	Soil Gas	12.53	24.97	ND	1	N/A	
012A	TB-20130118	Soil Gas	1.00	2.00	0.016	1	N/A	
Reporting Limit for DF =1; ND means not detected at or above the reporting limit		W	psia	psia	NA		NA	
		SoilGas	psia	psia	0.005		%	

* vapor samples are reported in %.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor

a21) reporting limit raised due to insufficient pressure in canister

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/17/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/24/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/24/13

Volatile Organics by P&T and GC/MS in µg/m³*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 1301458

Lab ID	1301458-001A	Initial Pressure (psia)	12.58
Client ID	SGMP-07-20130117	Final Pressure (psia)	25.10
Matrix	Soil Gas		

Compound	Conc. *	DF	MDL	RL	Compound	Conc. *	DF	MDL	RL
Acetone	ND<3.4	4.0	0.85	10000	tert-Amyl methyl ether (TAME)	ND<0.44	4.0	0.11	500
Benzene	ND<0.10	4.0	0.026	500	Bromobenzene	ND<0.12	4.0	0.03	500
Bromochloromethane	ND<0.18	4.0	0.045	0.25	Bromodichloromethane	ND<0.40	4.0	0.1	500
Bromoform	ND<0.13	4.0	0.033	500	Bromomethane	ND<0.32	4.0	0.08	500
2-Butanone (MEK)	ND<1.0	4.0	0.25	2000	t-Butyl alcohol (TBA)	ND<1.9	4.0	0.47	5000
n-Butyl benzene	77,J	4.0	0.042	500	sec-Butyl benzene	94,J	4.0	0.03	500
tert-Butyl benzene	ND<0.10	4.0	0.025	500	Carbon Disulfide	ND<0.13	4.0	0.033	500
Carbon Tetrachloride	ND<0.14	4.0	0.035	500	Chlorobenzene	ND<0.10	4.0	0.025	500
Chloroethane	ND<0.64	4.0	0.16	500	Chloroform	ND<0.13	4.0	0.032	500
Chloromethane	ND<1.2	4.0	0.31	500	2-Chlorotoluene	ND<0.14	4.0	0.035	500
4-Chlorotoluene	ND<0.14	4.0	0.035	500	Dibromochloromethane	ND<0.16	4.0	0.04	500
1,2-Dibromo-3-chloropropane	ND<0.24	4.0	0.06	500	1,2-Dibromoethane (EDB)	ND<0.24	4.0	0.06	500
Dibromomethane	ND<0.16	4.0	0.04	500	1,2-Dichlorobenzene	ND<0.16	4.0	0.04	500
1,3-Dichlorobenzene	ND<0.14	4.0	0.035	500	1,4-Dichlorobenzene	ND<0.14	4.0	0.036	500
Dichlorodifluoromethane	ND<0.13	4.0	0.033	500	1,1-Dichloroethane	ND<0.12	4.0	0.03	500
1,2-Dichloroethane (1,2-DCA)	ND<0.18	4.0	0.045	500	1,1-Dichloroethene	ND<0.17	4.0	0.043	500
cis-1,2-Dichloroethene	ND<0.10	4.0	0.025	500	trans-1,2-Dichloroethene	ND<0.12	4.0	0.03	500
1,2-Dichloropropane	ND<0.11	4.0	0.027	500	1,3-Dichloropropane	ND<0.20	4.0	0.05	500
2,2-Dichloropropane	ND<0.20	4.0	0.05	500	1,1-Dichloropropene	ND<0.12	4.0	0.03	500
cis-1,3-Dichloropropene	ND<0.18	4.0	0.045	500	trans-1,3-Dichloropropene	ND<0.14	4.0	0.035	500
Diisopropyl ether (DIPE)	ND<0.14	4.0	0.035	500	Ethylbenzene	140,J	4.0	0.025	500
Ethyl tert-butyl ether (ETBE)	ND<0.14	4.0	0.035	500	Freon 113	ND<0.13	4.0	0.033	10000
Hexachlorobutadiene	ND<0.17	4.0	0.043	500	Hexachloroethane	ND<0.12	4.0	0.03	500
2-Hexanone	ND<0.88	4.0	0.22	500	Isopropylbenzene	84,J	4.0	0.035	500
4-Isopropyl toluene	94,J	4.0	0.025	500	Methyl-t-butyl ether (MTBE)	180,J	4.0	0.05	500
Methylene chloride	270,J	4.0	0.026	500	4-Methyl-2-pentanone (MIBK)	ND<0.48	4.0	0.12	500
Naphthalene	ND<0.32	4.0	0.08	500	n-Propyl benzene	51,J	4.0	0.03	500
Styrene	ND<0.12	4.0	0.03	500	1,1,1,2-Tetrachloroethane	ND<0.14	4.0	0.035	500
1,1,2,2-Tetrachloroethane	ND<0.22	4.0	0.055	500	Tetrachloroethene	ND<0.16	4.0	0.041	500
Toluene	470,J	4.0	0.02	500	1,2,3-Trichlorobenzene	ND<0.22	4.0	0.055	500
1,2,4-Trichlorobenzene	ND<0.17	4.0	0.043	500	1,1,1-Trichloroethane	ND<0.10	4.0	0.025	500
1,1,2-Trichloroethane	ND<0.16	4.0	0.04	500	Trichloroethene	ND<0.12	4.0	0.03	500
Trichlorofluoromethane	160,J	4.0	0.024	500	1,2,3-Trichloropropane	ND<0.28	4.0	0.07	500
1,2,4-Trimethylbenzene	ND<0.13	4.0	0.032	500	1,3,5-Trimethylbenzene	120,J	4.0	0.035	500
Vinyl Chloride	ND<0.14	4.0	0.035	500	Xylenes, Total	ND<0.52	4.0	0.13	500

Surrogate Recoveries (%)

%SS1:	120	%SS2:	117
%SS3:	121		

Comments:

*soil vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

J) analyte detected below quantitation limits

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/17/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/25/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/25/13

Volatile Organics by P&T and GC/MS in µg/m³*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 1301458

Lab ID	1301458-002A	Initial Pressure (psia)	12.64
Client ID	SGMP-03-20130117	Final Pressure (psia)	25.21
Matrix	Soil Gas		

Compound	Conc. *	DF	MDL	RL	Compound	Conc. *	DF	MDL	RL
Acetone	ND<3.4	4.0	0.85	10000	tert-Amyl methyl ether (TAME)	ND<0.44	4.0	0.11	500
Benzene	ND<0.10	4.0	0.026	500	Bromobenzene	ND<0.12	4.0	0.03	500
Bromochloromethane	ND<0.18	4.0	0.045	0.25	Bromodichloromethane	ND<0.40	4.0	0.1	500
Bromoform	ND<0.13	4.0	0.033	500	Bromomethane	ND<0.32	4.0	0.08	500
2-Butanone (MEK)	ND<1.0	4.0	0.25	2000	t-Butyl alcohol (TBA)	ND<1.9	4.0	0.47	5000
n-Butyl benzene	ND<0.17	4.0	0.042	500	sec-Butyl benzene	94,J	4.0	0.03	500
tert-Butyl benzene	ND<0.10	4.0	0.025	500	Carbon Disulfide	ND<0.13	4.0	0.033	500
Carbon Tetrachloride	ND<0.14	4.0	0.035	500	Chlorobenzene	ND<0.10	4.0	0.025	500
Chloroethane	ND<0.64	4.0	0.16	500	Chloroform	ND<0.13	4.0	0.032	500
Chloromethane	ND<1.2	4.0	0.31	500	2-Chlorotoluene	ND<0.14	4.0	0.035	500
4-Chlorotoluene	ND<0.14	4.0	0.035	500	Dibromochloromethane	ND<0.16	4.0	0.04	500
1,2-Dibromo-3-chloropropane	ND<0.24	4.0	0.06	500	1,2-Dibromoethane (EDB)	ND<0.24	4.0	0.06	500
Dibromomethane	ND<0.16	4.0	0.04	500	1,2-Dichlorobenzene	ND<0.16	4.0	0.04	500
1,3-Dichlorobenzene	ND<0.14	4.0	0.035	500	1,4-Dichlorobenzene	ND<0.14	4.0	0.036	500
Dichlorodifluoromethane	ND<0.13	4.0	0.033	500	1,1-Dichloroethane	ND<0.12	4.0	0.03	500
1,2-Dichloroethane (1,2-DCA)	ND<0.18	4.0	0.045	500	1,1-Dichloroethene	ND<0.17	4.0	0.043	500
cis-1,2-Dichloroethene	ND<0.10	4.0	0.025	500	trans-1,2-Dichloroethene	ND<0.12	4.0	0.03	500
1,2-Dichloropropane	ND<0.11	4.0	0.027	500	1,3-Dichloropropane	ND<0.20	4.0	0.05	500
2,2-Dichloropropane	ND<0.20	4.0	0.05	500	1,1-Dichloropropene	ND<0.12	4.0	0.03	500
cis-1,3-Dichloropropene	ND<0.18	4.0	0.045	500	trans-1,3-Dichloropropene	ND<0.14	4.0	0.035	500
Diisopropyl ether (DIPE)	ND<0.14	4.0	0.035	500	Ethylbenzene	92,J	4.0	0.025	500
Ethyl tert-butyl ether (ETBE)	ND<0.14	4.0	0.035	500	Freon 113	ND<0.13	4.0	0.033	10000
Hexachlorobutadiene	ND<0.17	4.0	0.043	500	Hexachloroethane	ND<0.12	4.0	0.03	500
2-Hexanone	ND<0.88	4.0	0.22	500	Isopropylbenzene	93,J	4.0	0.035	500
4-Isopropyl toluene	110,J	4.0	0.025	500	Methyl-t-butyl ether (MTBE)	ND<0.20	4.0	0.05	500
Methylene chloride	190,J	4.0	0.026	500	4-Methyl-2-pentanone (MIBK)	ND<0.48	4.0	0.12	500
Naphthalene	ND<0.32	4.0	0.08	500	n-Propyl benzene	ND<0.12	4.0	0.03	500
Styrene	ND<0.12	4.0	0.03	500	1,1,1,2-Tetrachloroethane	ND<0.14	4.0	0.035	500
1,1,2,2-Tetrachloroethane	ND<0.22	4.0	0.055	500	Tetrachloroethene	ND<0.16	4.0	0.041	500
Toluene	430,J	4.0	0.02	500	1,2,3-Trichlorobenzene	ND<0.22	4.0	0.055	500
1,2,4-Trichlorobenzene	ND<0.17	4.0	0.043	500	1,1,1-Trichloroethane	ND<0.10	4.0	0.025	500
1,1,2-Trichloroethane	ND<0.16	4.0	0.04	500	Trichloroethene	ND<0.12	4.0	0.03	500
Trichlorofluoromethane	ND<0.096	4.0	0.024	500	1,2,3-Trichloropropane	ND<0.28	4.0	0.07	500
1,2,4-Trimethylbenzene	150,J	4.0	0.032	500	1,3,5-Trimethylbenzene	86,J	4.0	0.035	500
Vinyl Chloride	ND<0.14	4.0	0.035	500	Xylenes, Total	ND<0.52	4.0	0.13	500

Surrogate Recoveries (%)

%SS1:	119	%SS2:	116
%SS3:	111		

Comments:

*soil vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

J) analyte detected below quantitation limits

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/18/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/24/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/24/13

Volatile Organics by P&T and GC/MS in µg/m³*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 1301458

Lab ID	1301458-007A	Initial Pressure (psia)	13.62
Client ID	SGMP-06-20130118	Final Pressure (psia)	27.15
Matrix	Soil Gas		

Compound	Conc. *	DF	MDL	RL	Compound	Conc. *	DF	MDL	RL
Acetone	ND<17	20	0.85	10000	tert-Amyl methyl ether (TAME)	ND<2.2	20	0.11	500
Benzene	2700,J	20	0.026	500	Bromobenzene	ND<0.60	20	0.03	500
Bromochloromethane	ND<0.90	20	0.045	0.25	Bromodichloromethane	ND<2.0	20	0.1	500
Bromoform	ND<0.66	20	0.033	500	Bromomethane	ND<1.6	20	0.08	500
2-Butanone (MEK)	ND<5.0	20	0.25	2000	t-Butyl alcohol (TBA)	ND<9.4	20	0.47	5000
n-Butyl benzene	450,J	20	0.042	500	sec-Butyl benzene	500,J	20	0.03	500
tert-Butyl benzene	ND<0.50	20	0.025	500	Carbon Disulfide	ND<0.66	20	0.033	500
Carbon Tetrachloride	ND<0.70	20	0.035	500	Chlorobenzene	2800,J	20	0.025	500
Chloroethane	ND<3.2	20	0.16	500	Chloroform	ND<0.64	20	0.032	500
Chloromethane	ND<6.2	20	0.31	500	2-Chlorotoluene	ND<0.70	20	0.035	500
4-Chlorotoluene	ND<0.70	20	0.035	500	Dibromochloromethane	ND<0.80	20	0.04	500
1,2-Dibromo-3-chloropropane	ND<1.2	20	0.06	500	1,2-Dibromoethane (EDB)	ND<1.2	20	0.06	500
Dibromomethane	ND<0.80	20	0.04	500	1,2-Dichlorobenzene	ND<0.80	20	0.04	500
1,3-Dichlorobenzene	ND<0.70	20	0.035	500	1,4-Dichlorobenzene	ND<0.72	20	0.036	500
Dichlorodifluoromethane	ND<0.66	20	0.033	500	1,1-Dichloroethane	ND<0.60	20	0.03	500
1,2-Dichloroethane (1,2-DCA)	ND<0.90	20	0.045	500	1,1-Dichloroethene	ND<0.86	20	0.043	500
cis-1,2-Dichloroethene	1700,J	20	0.025	500	trans-1,2-Dichloroethene	ND<0.60	20	0.03	500
1,2-Dichloropropane	ND<0.54	20	0.027	500	1,3-Dichloropropane	ND<1.0	20	0.05	500
2,2-Dichloropropane	ND<1.0	20	0.05	500	1,1-Dichloropropene	ND<0.60	20	0.03	500
cis-1,3-Dichloropropene	ND<0.90	20	0.045	500	trans-1,3-Dichloropropene	ND<0.70	20	0.035	500
Diisopropyl ether (DIPE)	ND<0.70	20	0.035	500	Ethylbenzene	61,000	20	0.025	500
Ethyl tert-butyl ether (ETBE)	ND<0.70	20	0.035	500	Freon 113	ND<0.66	20	0.033	10000
Hexachlorobutadiene	ND<0.86	20	0.043	500	Hexachloroethane	ND<0.60	20	0.03	500
2-Hexanone	ND<4.4	20	0.22	500	Isopropylbenzene	7500,J	20	0.035	500
4-Isopropyl toluene	ND<0.50	20	0.025	500	Methyl-t-butyl ether (MTBE)	ND<1.0	20	0.05	500
Methylene chloride	ND<0.52	20	0.026	500	4-Methyl-2-pentanone (MIBK)	ND<2.4	20	0.12	500
Naphthalene	ND<1.6	20	0.08	500	n-Propyl benzene	5500,J	20	0.03	500
Styrene	ND<0.60	20	0.03	500	1,1,1,2-Tetrachloroethane	ND<0.70	20	0.035	500
1,1,2,2-Tetrachloroethane	ND<1.1	20	0.055	500	Tetrachloroethene	ND<0.82	20	0.041	500
Toluene	2500,J	20	0.02	500	1,2,3-Trichlorobenzene	ND<1.1	20	0.055	500
1,2,4-Trichlorobenzene	ND<0.86	20	0.043	500	1,1,1-Trichloroethane	ND<0.50	20	0.025	500
1,1,2-Trichloroethane	ND<0.80	20	0.04	500	Trichloroethene	ND<0.60	20	0.03	500
Trichlorofluoromethane	ND<0.48	20	0.024	500	1,2,3-Trichloropropane	ND<1.4	20	0.07	500
1,2,4-Trimethylbenzene	3600,J	20	0.032	500	1,3,5-Trimethylbenzene	3200,J	20	0.035	500
Vinyl Chloride	ND<0.70	20	0.035	500	Xylenes, Total	73,000	20	0.13	500

Surrogate Recoveries (%)

%SS1:	116	%SS2:	122
%SS3:	114		

Comments:

*soil vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

J) analyte detected below quantitation limits

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/17/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/24/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/24/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1301458

Lab ID	1301458-003A	Initial Pressure (psia)	12.05
Client ID	SGMP-01-20130117	Final Pressure (psia)	24.00
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	ND	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	92	%SS2:	90
%SS3:	86		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a21) reporting limit raised due to insufficient pressure in canister

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/17/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/28/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/28/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1301458

Lab ID	1301458-004A	Initial Pressure (psia)	6.03
Client ID	SGMP-09-20130117	Final Pressure (psia)	16.02
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<160	1.0	120	Acrylonitrile	ND<5.8	1.0	4.4
tert-Amyl methyl ether (TAME)	ND<11	1.0	8.5	Benzene	ND<8.6	1.0	6.5
Benzyl chloride	ND<15	1.0	11	Bromodichloromethane	ND<19	1.0	14
Bromoform	ND<28	1.0	21	Bromomethane	ND<10	1.0	7.9
1,3-Butadiene	ND<6.0	1.0	4.5	2-Butanone (MEK)	ND<200	1.0	150
t-Butyl alcohol (TBA)	ND<82	1.0	62	Carbon Disulfide	ND<8.4	1.0	6.3
Carbon Tetrachloride	ND<17	1.0	13	Chlorobenzene	ND<12	1.0	9.4
Chloroethane	ND<7.2	1.0	5.4	Chloroform	59	1.0	9.9
Chloromethane	ND<5.6	1.0	4.2	Cyclohexane	ND<240	1.0	180
Dibromochloromethane	ND<23	1.0	17	1,2-Dibromo-3-chloropropane	ND<27	1.0	20
1,2-Dibromoethane (EDB)	ND<21	1.0	16	1,2-Dichlorobenzene	ND<16	1.0	12
1,3-Dichlorobenzene	ND<16	1.0	12	1,4-Dichlorobenzene	ND<16	1.0	12
Dichlorodifluoromethane	ND<13	1.0	10	1,1-Dichloroethane	ND<11	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND<11	1.0	8.2	1,1-Dichloroethene	ND<11	1.0	8.1
cis-1,2-Dichloroethene	ND<11	1.0	8.1	trans-1,2-Dichloroethene	ND<11	1.0	8.1
1,2-Dichloropropane	ND<12	1.0	9.4	cis-1,3-Dichloropropene	ND<12	1.0	9.2
trans-1,3-Dichloropropene	ND<12	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND<19	1.0	14
Diisopropyl ether (DIPE)	ND<11	1.0	8.5	1,4-Dioxane	ND<9.7	1.0	7.3
Ethanol	ND<130	1.0	96	Ethyl acetate	ND<25	1.0	19
Ethyl tert-butyl ether (ETBE)	ND<11	1.0	8.5	Ethylbenzene	ND<12	1.0	8.8
4-Ethyltoluene	ND<13	1.0	10	Freon 113	ND<21	1.0	16
Heptane	ND<280	1.0	210	Hexachlorobutadiene	ND<29	1.0	22
Hexane	ND<240	1.0	180	2-Hexanone	ND<280	1.0	210
4-Methyl-2-pentanone (MIBK)	ND<11	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND<9.7	1.0	7.3
Methylene chloride	ND<9.4	1.0	7.1	Naphthalene	ND<15	1.0	11
Propene	ND<120	1.0	88	Styrene	ND<11	1.0	8.6
1,1,1,2-Tetrachloroethane	ND<19	1.0	14	1,1,2,2-Tetrachloroethane	ND<19	1.0	14
Tetrachloroethene	ND<19	1.0	14	Tetrahydrofuran	ND<8.0	1.0	6.0
Toluene	ND<10	1.0	7.7	1,2,4-Trichlorobenzene	ND<20	1.0	15
1,1,1-Trichloroethane	ND<15	1.0	11	1,1,2-Trichloroethane	ND<15	1.0	11
Trichloroethene	ND<15	1.0	11	Trichlorofluoromethane	ND<15	1.0	11
1,2,4-Trimethylbenzene	ND<13	1.0	10	1,3,5-Trimethylbenzene	ND<13	1.0	10
Vinyl Acetate	ND<240	1.0	180	Vinyl Chloride	ND<6.9	1.0	5.2
Xylenes, Total	ND<36	1.0	27				

Surrogate Recoveries (%)

%SS1:	95	%SS2:	91
%SS3:	87		

Comments: a21

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a21) reporting limit raised due to insufficient pressure in canister

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/17/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/24/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/24/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1301458

Lab ID	1301458-005A	Initial Pressure (psia)	12.03
Client ID	SGMP-04-20130117	Final Pressure (psia)	23.98
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	ND	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	92	%SS2:	90
%SS3:	85		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a21) reporting limit raised due to insufficient pressure in canister

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/17/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/24/13-01/25/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/24/13-01/25/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1301458

Lab ID	1301458-006A	Initial Pressure (psia)	12.13
Client ID	SGMP-05-20130117	Final Pressure (psia)	24.18
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	790	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethyl acetate	710	10	19	Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5
Ethylbenzene	ND	1.0	8.8	4-Ethyltoluene	ND	1.0	10
Freon 113	ND	1.0	16	Heptane	ND	1.0	210
Hexachlorobutadiene	ND	1.0	22	Hexane	ND	1.0	180
2-Hexanone	ND	1.0	210	4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3
Methyl-t-butyl ether (MTBE)	ND	1.0	7.3	Methylene chloride	ND	1.0	7.1
Naphthalene	ND	1.0	11	Propene	ND	1.0	88
Styrene	ND	1.0	8.6	1,1,1,2-Tetrachloroethane	ND	1.0	14
1,1,2,2-Tetrachloroethane	ND	1.0	14	Tetrachloroethene	ND	1.0	14
Tetrahydrofuran	ND	1.0	6.0	Toluene	ND	1.0	7.7
1,2,4-Trichlorobenzene	ND	1.0	15	1,1,1-Trichloroethane	ND	1.0	11
1,1,2-Trichloroethane	ND	1.0	11	Trichloroethene	ND	1.0	11
Trichlorofluoromethane	ND	1.0	11	1,2,4-Trimethylbenzene	ND	1.0	10
1,3,5-Trimethylbenzene	ND	1.0	10	Vinyl Acetate	ND	1.0	180
Vinyl Chloride	ND	1.0	5.2	Xylenes, Total	ND	1.0	27

Surrogate Recoveries (%)

%SS1:	86	%SS2:	91
%SS3:	91		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a21) reporting limit raised due to insufficient pressure in canister

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/18/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/24/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/24/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1301458

Lab ID	1301458-008A	Initial Pressure (psia)	13.27
Client ID	SGMP-10-20130118	Final Pressure (psia)	26.44
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	11	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	17	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	94	%SS2:	91
%SS3:	87		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a21) reporting limit raised due to insufficient pressure in canister

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/18/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/24/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/24/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1301458

Lab ID	1301458-009A	Initial Pressure (psia)	13.28
Client ID	SGMP-100-20130118	Final Pressure (psia)	26.46
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	43	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	ND	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	20	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	94	%SS2:	90
%SS3:	87		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a21) reporting limit raised due to insufficient pressure in canister

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/18/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/22/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/22/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1301458

Lab ID	1301458-010A	Initial Pressure (psia)	13.46
Client ID	SGMP-11-20130118	Final Pressure (psia)	26.83
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	14	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	15	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	100	%SS2:	91
%SS3:	88		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a21) reporting limit raised due to insufficient pressure in canister

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/18/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/22/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/22/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1301458

Lab ID	1301458-011A	Initial Pressure (psia)	12.53
Client ID	SGMP-12-20130118	Final Pressure (psia)	24.97
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	25	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	11	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	97	%SS2:	90
%SS3:	89		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a21) reporting limit raised due to insufficient pressure in canister

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/18/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/22/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/22/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1301458

Lab ID	1301458-012A	Initial Pressure (psia)	1.00
Client ID	TB-20130118	Final Pressure (psia)	1.00
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	ND	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	96	%SS2:	90
%SS3:	86		

Comments:

*vapor samples are reported in µg/m³.

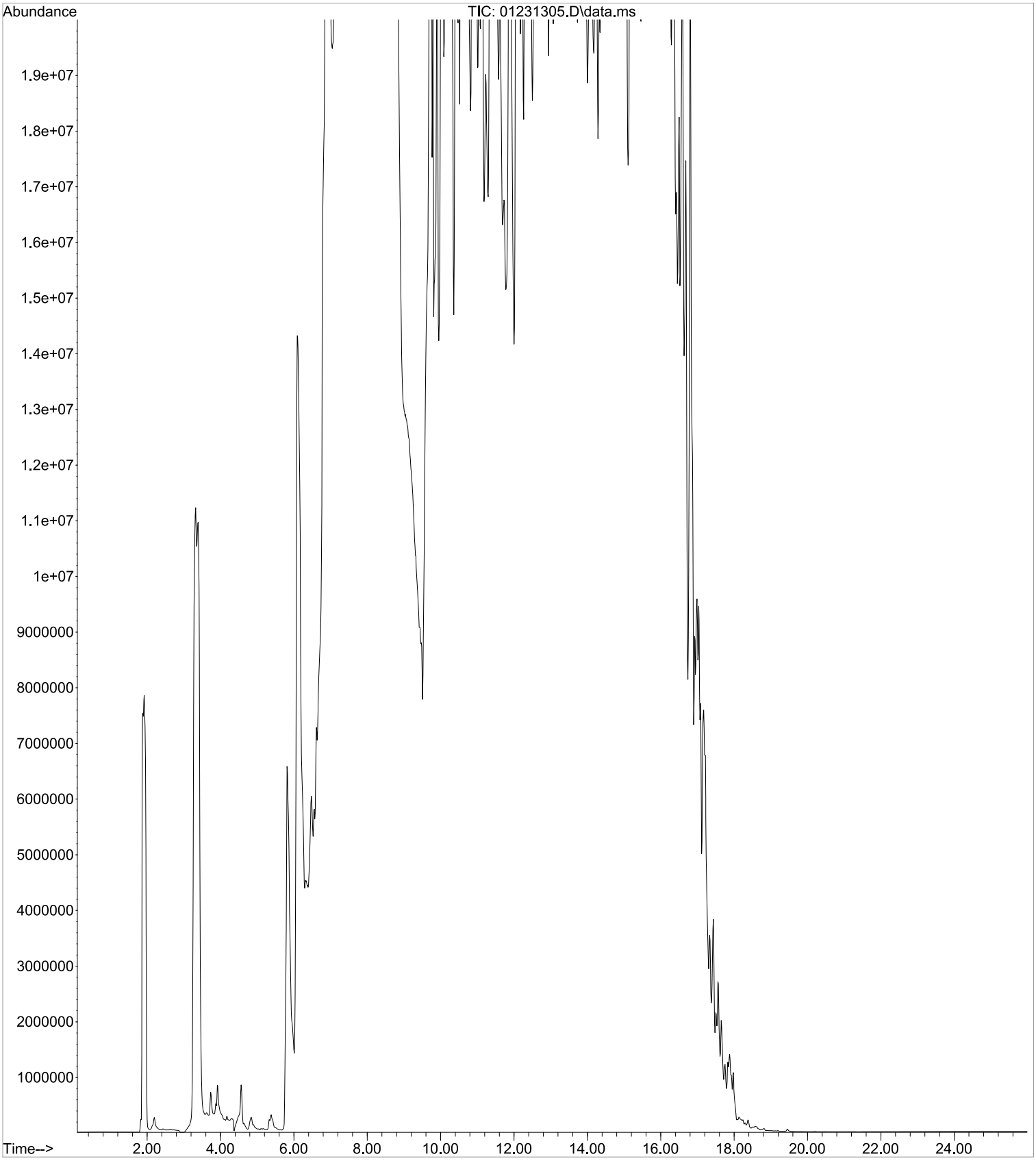
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

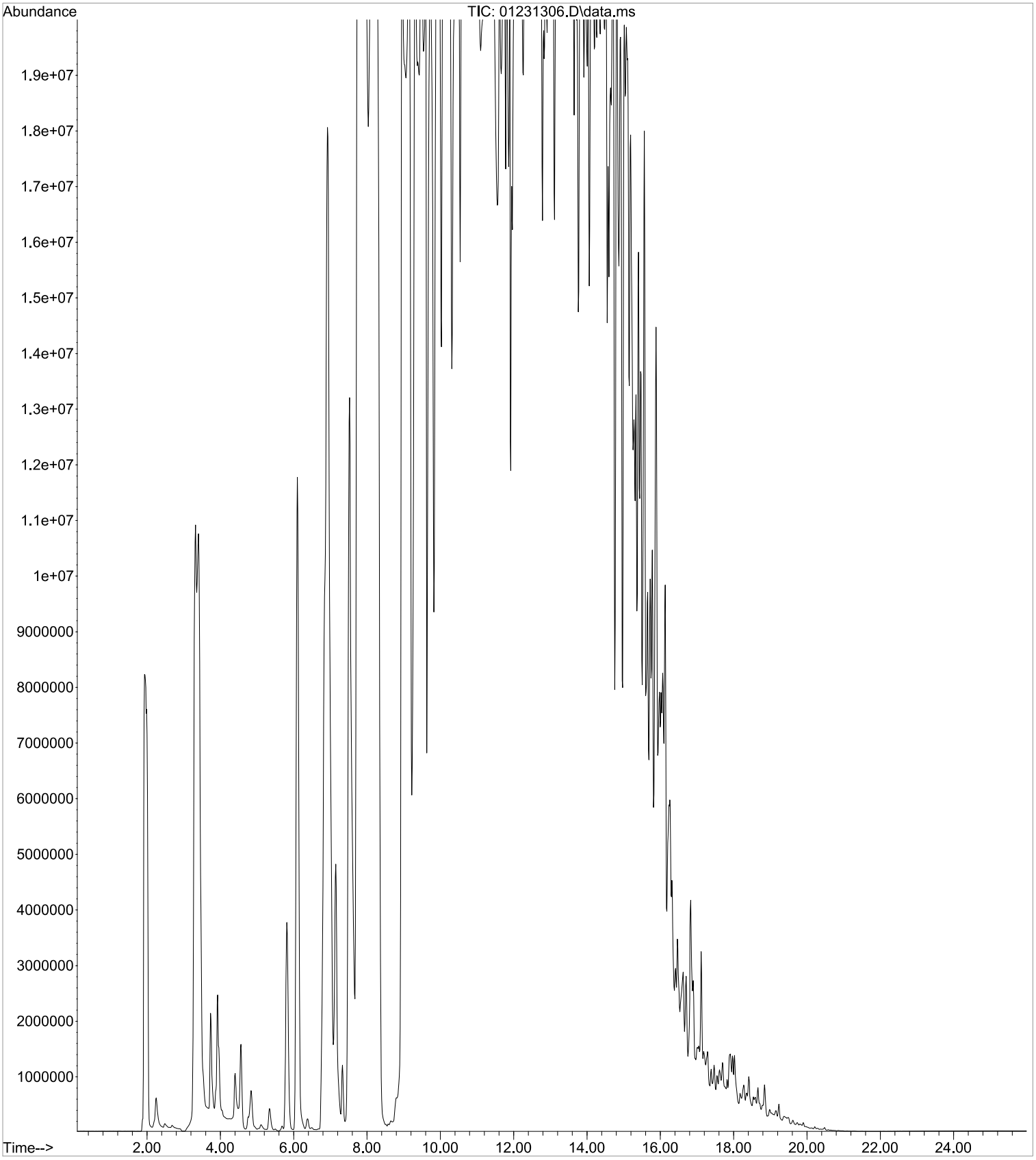
%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a21) reporting limit raised due to insufficient pressure in canister

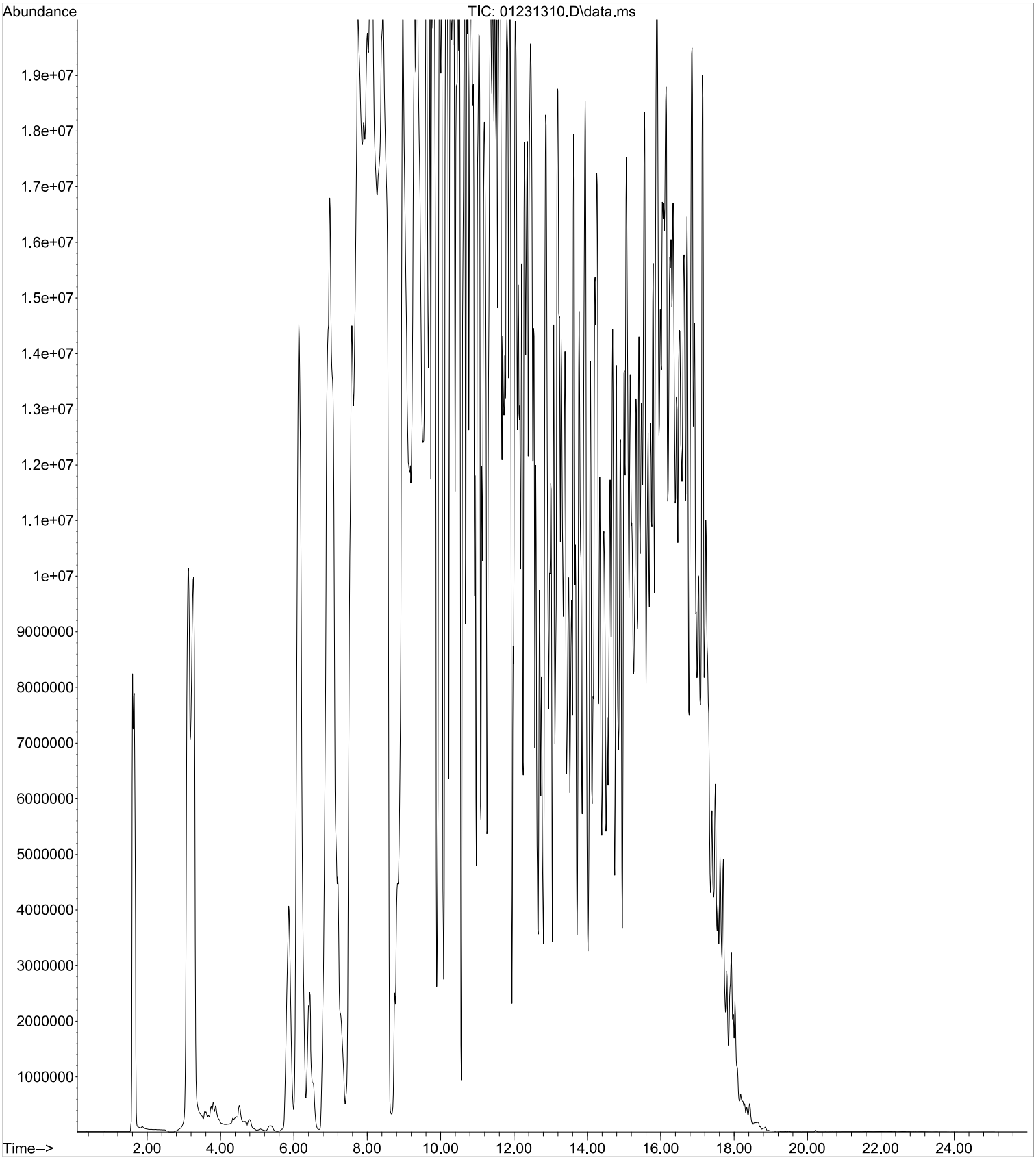
File :D:\HPCHEM\GC24\DATA\01231305.D
Operator :
Acquired : 23 Jan 2013 5:24 pm using AcqMethod TO15_2012_MIKE.M
Instrument : GC-24
Sample Name: 1301458-001A ppmv
Misc Info : TO15_SOILGAS
Vial Number: 1



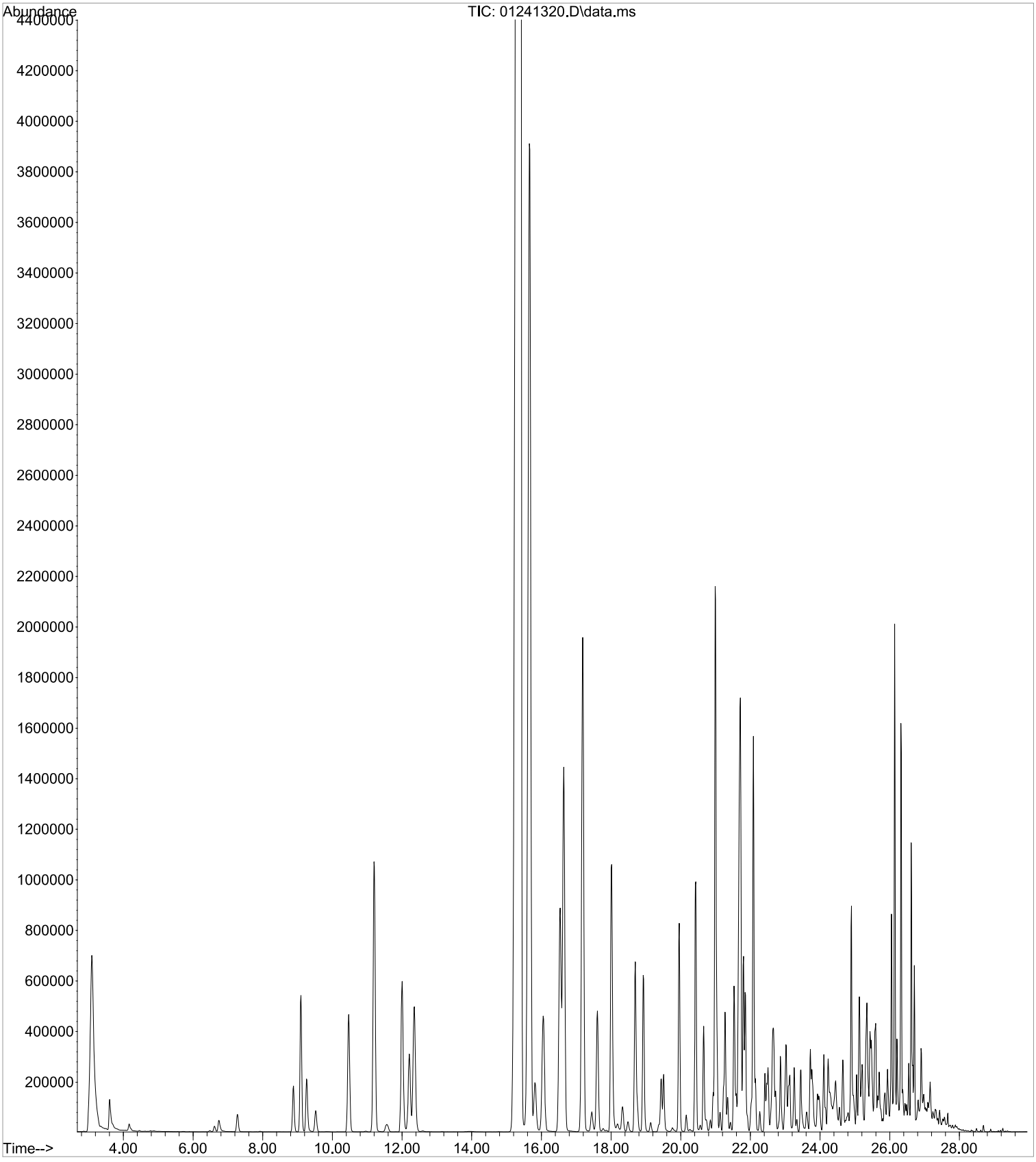
File :D:\HPCHEM\GC24\DATA\01231306.D
Operator :
Acquired : 23 Jan 2013 6:06 pm using AcqMethod TO15_2012_MIKE.M
Instrument : GC-24
Sample Name: 1301458-002A ppmv
Misc Info : TO15_SOILGAS
Vial Number: 2



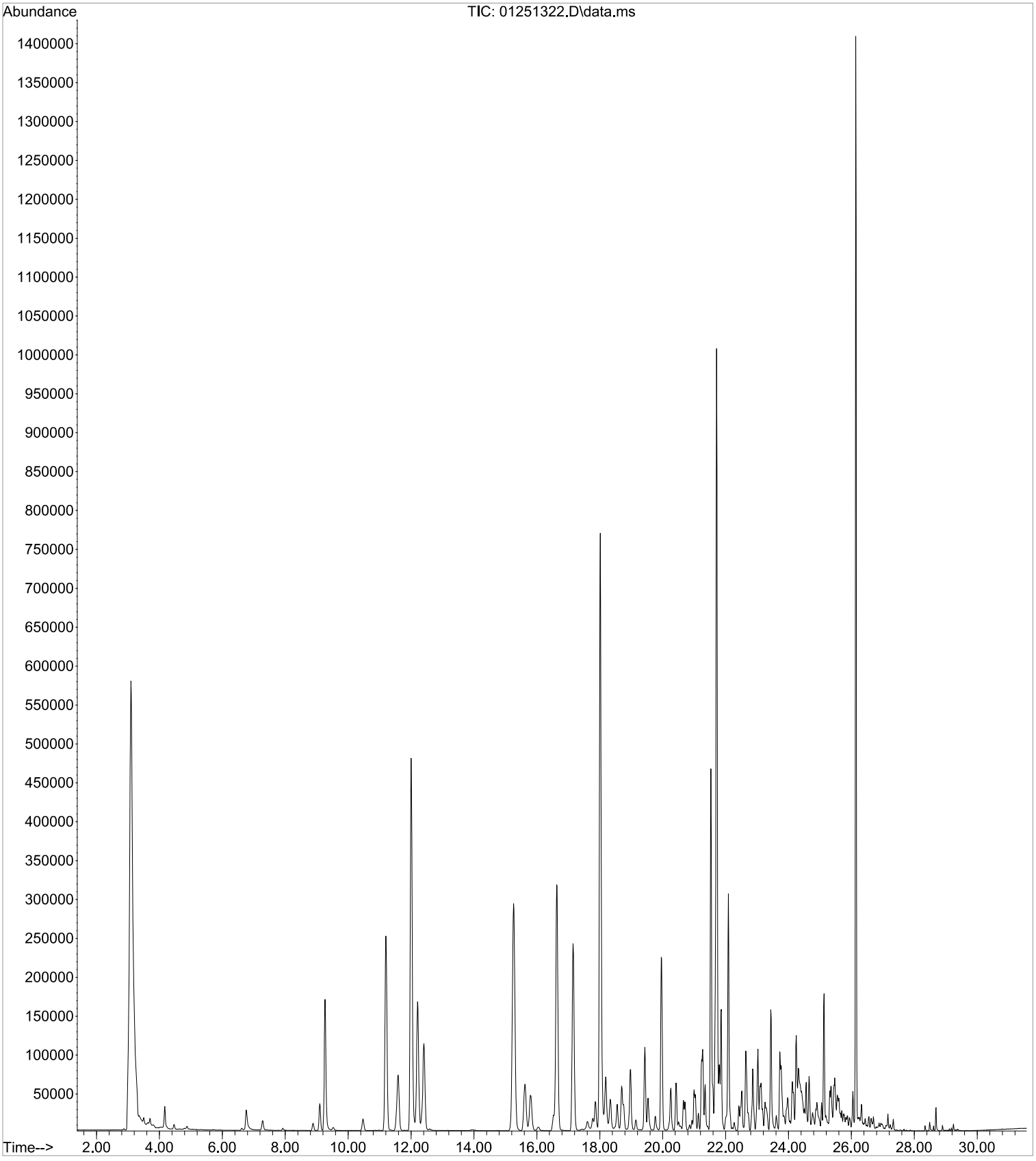
File :D:\HPCHEM\GC24\DATA\01231310.D
Operator :
Acquired : 23 Jan 2013 8:45 pm using AcqMethod TO15_2012_MIKE.M
Instrument : GC-24
Sample Name: 1301458-007A ppmv 20ml
Misc Info : TO15_SOILGAS
Vial Number: 6



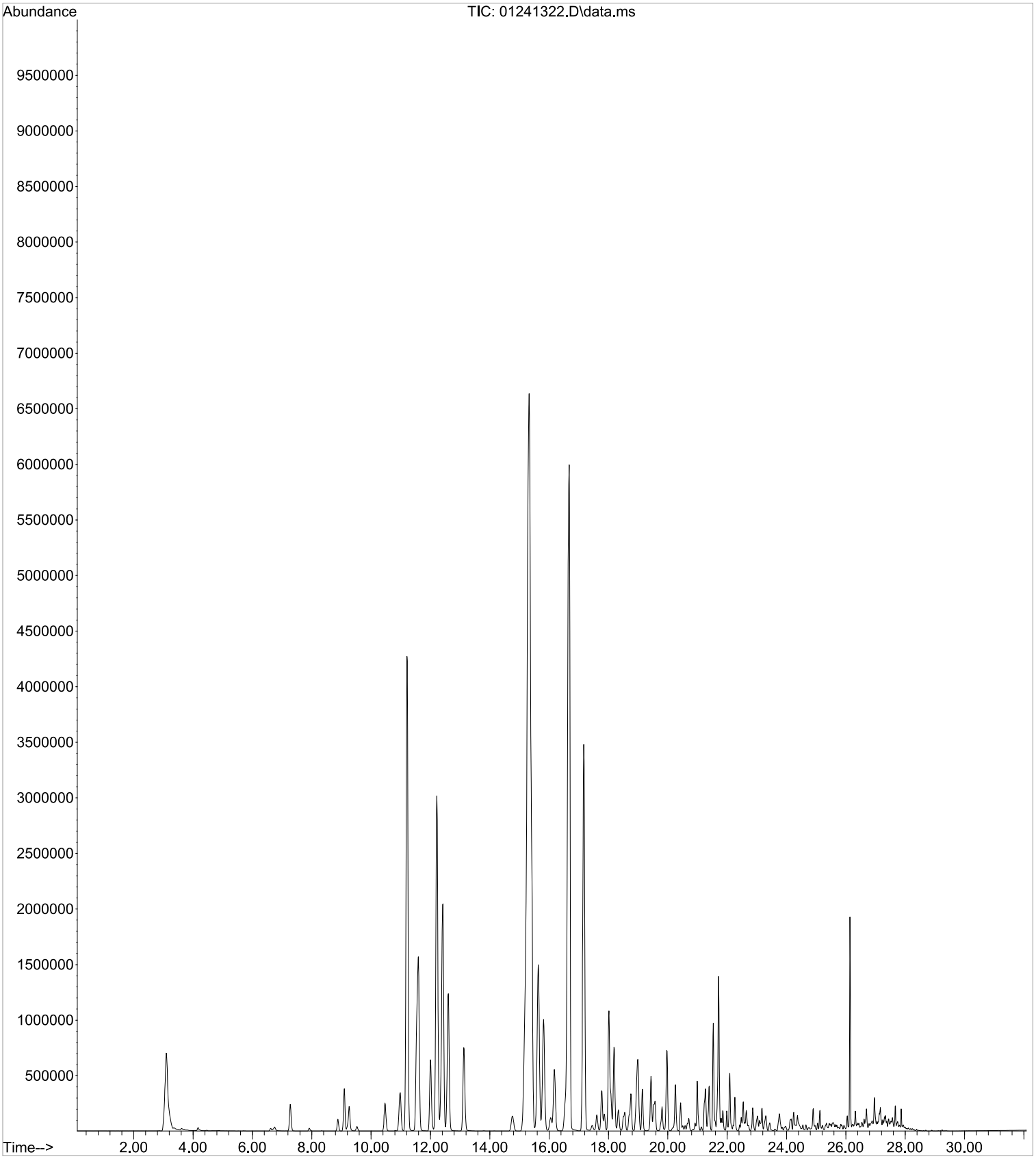
File :D:\HPCHEM\GC28\DATA\01241320.D
Operator :
Acquired : 24 Jan 2013 8:43 pm using AcqMethod 8260FG.M
Instrument : GC-28
Sample Name: 1301458-001A A PPMV
Misc Info : T015SOILGAS
Vial Number: 20



File :D:\HPCHEM\GC28\DATA\01251322.D
Operator :
Acquired : 25 Jan 2013 9:46 pm using AcqMethod 8260FG.M
Instrument : GC-28
Sample Name: 1301458-002A A RR
Misc Info : TO15SOILGAS
Vial Number: 22



File :D:\HPCHEM\GC28\DATA\01241322.D
Operator :
Acquired : 24 Jan 2013 10:01 pm using AcqMethod 8260FG.M
Instrument : GC-28
Sample Name: 1301458-007A A PPMV
Misc Info : 8260B_W
Vial Number: 22



McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR ASTM D 1946-90

W.O. Sample Matrix: SoilGas | QC Matrix: Air | BatchID: 74248 | WorkOrder: 1301458

EPA Method: ASTM D 1946-90 **Extraction: ASTM D 1946-90** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µL/L	µL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Carbon Dioxide	N/A	100	N/A	N/A	N/A	79.9	N/A	N/A	70 - 130
Methane	N/A	10	N/A	N/A	N/A	94.5	N/A	N/A	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 74248 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301458-001A	01/17/13 11:15 AM	01/28/13	01/28/13 1:36 PM	1301458-001A	01/17/13 11:15 AM	01/28/13	01/28/13 1:36 PM
1301458-002A	01/17/13 12:25 PM	01/28/13	01/28/13 2:03 PM	1301458-002A	01/17/13 12:25 PM	01/28/13	01/28/13 2:03 PM
1301458-003A	01/17/13 1:35 PM	01/25/13	01/25/13 3:18 PM	1301458-004A	01/17/13 2:21 PM	01/25/13	01/25/13 3:42 PM
1301458-005A	01/17/13 3:28 PM	01/25/13	01/25/13 4:07 PM	1301458-005A	01/17/13 3:28 PM	01/28/13	01/28/13 2:27 PM
1301458-006A	01/17/13 4:10 PM	01/28/13	01/28/13 2:55 PM	1301458-006A	01/17/13 4:10 PM	01/28/13	01/28/13 2:55 PM
1301458-007A	01/18/13 8:20 AM	01/28/13	01/28/13 3:07 PM	1301458-007A	01/18/13 8:20 AM	01/28/13	01/28/13 3:19 PM
1301458-008A	01/18/13 9:31 AM	01/25/13	01/25/13 4:56 PM	1301458-008A	01/18/13 9:31 AM	01/28/13	01/28/13 3:34 PM
1301458-009A	01/18/13 9:54 AM	01/25/13	01/25/13 5:20 PM	1301458-009A	01/18/13 9:54 AM	01/28/13	01/28/13 3:57 PM
1301458-010A	01/18/13 10:35 AM	01/28/13	01/28/13 4:12 PM	1301458-010A	01/18/13 10:35 AM	01/28/13	01/28/13 4:12 PM
1301458-011A	01/18/13 11:19 AM	01/28/13	01/28/13 4:41 PM	1301458-011A	01/18/13 11:19 AM	01/28/13	01/28/13 4:41 PM
1301458-012A	01/18/13 12:00 PM	01/28/13	01/28/13 4:53 PM	1301458-012A	01/18/13 12:00 PM	01/28/13	01/28/13 5:05 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR ASTM D 1946-90

W.O. Sample Matrix: Soilgas | QC Matrix: Soilgas | BatchID: 74142 | WorkOrder: 1301458

EPA Method: ASTM D 1946-90 **Extraction: ASTM D 1946-90** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	%	%	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Helium	N/A	0.010	N/A	N/A	N/A	99.3	N/A	N/A	60 - 140

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 74142 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301458-001A	01/17/13 11:15 AM	01/22/13	01/22/13 4:46 PM	1301458-002A	01/17/13 12:25 PM	01/22/13	01/22/13 3:21 PM
1301458-003A	01/17/13 1:35 PM	01/22/13	01/22/13 3:35 PM	1301458-005A	01/17/13 3:28 PM	01/22/13	01/22/13 3:41 PM
1301458-006A	01/17/13 4:10 PM	01/22/13	01/22/13 4:01 PM	1301458-007A	01/18/13 8:20 AM	01/22/13	01/22/13 4:07 PM
1301458-008A	01/18/13 9:31 AM	01/22/13	01/22/13 4:20 PM	1301458-009A	01/18/13 9:54 AM	01/22/13	01/22/13 4:33 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR ASTM D 1946-90

W.O. Sample Matrix: Soilgas | QC Matrix: Soilgas | BatchID: 74195 | WorkOrder: 1301458

EPA Method: ASTM D 1946-90 **Extraction: ASTM D 1946-90** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	%	%	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Helium	N/A	0.010	N/A	N/A	N/A	100	N/A	N/A	60 - 140

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 74195 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301458-004A	01/17/13 2:21 PM	01/23/13	01/23/13 1:58 PM	1301458-010A	01/18/13 10:35 AM	01/23/13	01/23/13 2:05 PM
1301458-011A	01/18/13 11:19 AM	01/23/13	01/23/13 2:24 PM	1301458-012A	01/18/13 12:00 PM	01/23/13	01/23/13 2:37 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

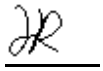
% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644


QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soilgas | QC Matrix: Water | BatchID: 74281 | WorkOrder: 1301458

EPA Method: SW8260B **Extraction: SW5030B** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	N/A	10	N/A	N/A	N/A	110	N/A	N/A	70 - 130
Benzene	N/A	10	N/A	N/A	N/A	102	N/A	N/A	70 - 130
t-Butyl alcohol (TBA)	N/A	40	N/A	N/A	N/A	114	N/A	N/A	70 - 130
Chlorobenzene	N/A	10	N/A	N/A	N/A	99.1	N/A	N/A	70 - 130
1,2-Dibromoethane (EDB)	N/A	10	N/A	N/A	N/A	107	N/A	N/A	70 - 130
1,2-Dichloroethane (1,2-DCA)	N/A	10	N/A	N/A	N/A	106	N/A	N/A	70 - 130
1,1-Dichloroethene	N/A	10	N/A	N/A	N/A	101	N/A	N/A	70 - 130
Diisopropyl ether (DIPE)	N/A	10	N/A	N/A	N/A	106	N/A	N/A	70 - 130
Ethyl tert-butyl ether (ETBE)	N/A	10	N/A	N/A	N/A	107	N/A	N/A	70 - 130
Methyl-t-butyl ether (MTBE)	N/A	10	N/A	N/A	N/A	110	N/A	N/A	70 - 130
Toluene	N/A	10	N/A	N/A	N/A	95.6	N/A	N/A	70 - 130
Trichloroethene	N/A	10	N/A	N/A	N/A	102	N/A	N/A	70 - 130
%SS1:	N/A	25	N/A	N/A	N/A	123	N/A	N/A	70 - 130
%SS2:	N/A	25	N/A	N/A	N/A	120	N/A	N/A	70 - 130
%SS3:	N/A	2.5	N/A	N/A	N/A	109	N/A	N/A	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 74281 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301458-001A	01/17/13 11:15 AM	01/24/13	01/24/13 8:43 PM	1301458-002A	01/17/13 12:25 PM	01/25/13	01/25/13 9:46 PM
1301458-006A	01/17/13 4:10 PM	01/28/13	01/28/13 4:37 PM	1301458-007A	01/18/13 8:20 AM	01/24/13	01/24/13 10:01 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soilgas | QC Matrix: Soilgas | BatchID: 74184 | WorkOrder: 1301458

EPA Method: TO15 | **Extraction: TO15** | **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Acrylonitrile	N/A	25	N/A	N/A	N/A	73.3	N/A	N/A	60 - 140
tert-Amyl methyl ether (TAME)	N/A	25	N/A	N/A	N/A	106	N/A	N/A	60 - 140
Benzene	N/A	25	N/A	N/A	N/A	103	N/A	N/A	60 - 140
Benzyl chloride	N/A	25	N/A	N/A	N/A	101	N/A	N/A	60 - 140
Bromodichloromethane	N/A	25	N/A	N/A	N/A	112	N/A	N/A	60 - 140
Bromoform	N/A	25	N/A	N/A	N/A	103	N/A	N/A	60 - 140
t-Butyl alcohol (TBA)	N/A	25	N/A	N/A	N/A	75.4	N/A	N/A	60 - 140
Carbon Disulfide	N/A	25	N/A	N/A	N/A	68	N/A	N/A	60 - 140
Carbon Tetrachloride	N/A	25	N/A	N/A	N/A	112	N/A	N/A	60 - 140
Chlorobenzene	N/A	25	N/A	N/A	N/A	101	N/A	N/A	60 - 140
Chloroethane	N/A	25	N/A	N/A	N/A	124	N/A	N/A	60 - 140
Chloroform	N/A	25	N/A	N/A	N/A	107	N/A	N/A	60 - 140
Chloromethane	N/A	25	N/A	N/A	N/A	94	N/A	N/A	60 - 140
Dibromochloromethane	N/A	25	N/A	N/A	N/A	112	N/A	N/A	60 - 140
1,2-Dibromo-3-chloropropane	N/A	25	N/A	N/A	N/A	122	N/A	N/A	60 - 140
1,2-Dibromoethane (EDB)	N/A	25	N/A	N/A	N/A	104	N/A	N/A	60 - 140
1,2-Dichlorobenzene	N/A	25	N/A	N/A	N/A	97.8	N/A	N/A	60 - 140
1,3-Dichlorobenzene	N/A	25	N/A	N/A	N/A	98.9	N/A	N/A	60 - 140
1,4-Dichlorobenzene	N/A	25	N/A	N/A	N/A	84	N/A	N/A	60 - 140
Dichlorodifluoromethane	N/A	25	N/A	N/A	N/A	88.6	N/A	N/A	60 - 140
1,1-Dichloroethane	N/A	25	N/A	N/A	N/A	107	N/A	N/A	60 - 140
1,2-Dichloroethane (1,2-DCA)	N/A	25	N/A	N/A	N/A	112	N/A	N/A	60 - 140
1,1-Dichloroethene	N/A	25	N/A	N/A	N/A	83.7	N/A	N/A	60 - 140
cis-1,2-Dichloroethene	N/A	25	N/A	N/A	N/A	106	N/A	N/A	60 - 140
trans-1,2-Dichloroethene	N/A	25	N/A	N/A	N/A	105	N/A	N/A	60 - 140
1,2-Dichloropropane	N/A	25	N/A	N/A	N/A	107	N/A	N/A	60 - 140
cis-1,3-Dichloropropene	N/A	25	N/A	N/A	N/A	106	N/A	N/A	60 - 140
trans-1,3-Dichloropropene	N/A	25	N/A	N/A	N/A	111	N/A	N/A	60 - 140
1,2-Dichloro-1,1,2,2-tetrafluoroethane	N/A	25	N/A	N/A	N/A	83.6	N/A	N/A	60 - 140
Diisopropyl ether (DIPE)	N/A	25	N/A	N/A	N/A	116	N/A	N/A	60 - 140
1,4-Dioxane	N/A	25	N/A	N/A	N/A	100	N/A	N/A	60 - 140

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soilgas | QC Matrix: Soilgas | BatchID: 74184 | WorkOrder: 1301458

EPA Method: TO15 **Extraction: TO15** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Ethyl acetate	N/A	25	N/A	N/A	N/A	111	N/A	N/A	60 - 140
Ethyl tert-butyl ether (ETBE)	N/A	25	N/A	N/A	N/A	109	N/A	N/A	60 - 140
Ethylbenzene	N/A	25	N/A	N/A	N/A	93.8	N/A	N/A	60 - 140
Freon 113	N/A	25	N/A	N/A	N/A	67.8	N/A	N/A	60 - 140
Hexachlorobutadiene	N/A	25	N/A	N/A	N/A	89.6	N/A	N/A	60 - 140
4-Methyl-2-pentanone (MIBK)	N/A	25	N/A	N/A	N/A	111	N/A	N/A	60 - 140
Methyl-t-butyl ether (MTBE)	N/A	25	N/A	N/A	N/A	105	N/A	N/A	60 - 140
Methylene chloride	N/A	25	N/A	N/A	N/A	66	N/A	N/A	60 - 140
Naphthalene	N/A	25	N/A	N/A	N/A	107	N/A	N/A	60 - 140
Styrene	N/A	25	N/A	N/A	N/A	98.4	N/A	N/A	60 - 140
1,1,1,2-Tetrachloroethane	N/A	25	N/A	N/A	N/A	109	N/A	N/A	60 - 140
1,1,2,2-Tetrachloroethane	N/A	25	N/A	N/A	N/A	105	N/A	N/A	60 - 140
Tetrachloroethene	N/A	25	N/A	N/A	N/A	98	N/A	N/A	60 - 140
Tetrahydrofuran	N/A	25	N/A	N/A	N/A	95.6	N/A	N/A	60 - 140
Toluene	N/A	25	N/A	N/A	N/A	101	N/A	N/A	60 - 140
1,2,4-Trichlorobenzene	N/A	25	N/A	N/A	N/A	94.4	N/A	N/A	60 - 140
1,1,1-Trichloroethane	N/A	25	N/A	N/A	N/A	111	N/A	N/A	60 - 140
1,1,2-Trichloroethane	N/A	25	N/A	N/A	N/A	105	N/A	N/A	60 - 140
Trichloroethene	N/A	25	N/A	N/A	N/A	104	N/A	N/A	60 - 140
1,2,4-Trimethylbenzene	N/A	25	N/A	N/A	N/A	100	N/A	N/A	60 - 140
1,3,5-Trimethylbenzene	N/A	25	N/A	N/A	N/A	99.8	N/A	N/A	60 - 140
Vinyl Chloride	N/A	25	N/A	N/A	N/A	78.1	N/A	N/A	60 - 140
%SS1:	N/A	500	N/A	N/A	N/A	89	N/A	N/A	60 - 140
%SS2:	N/A	500	N/A	N/A	N/A	92	N/A	N/A	60 - 140
%SS3:	N/A	500	N/A	N/A	N/A	90	N/A	N/A	60 - 140

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soilgas | QC Matrix: Soilgas | BatchID: 74184 | WorkOrder: 1301458

EPA Method: TO15 | **Extraction: TO15** | **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS

BATCH 74184 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301458-003A	01/17/13 1:35 PM	01/24/13	01/24/13 6:46 PM	1301458-004A	01/17/13 2:21 PM	01/28/13	01/28/13 1:59 PM
1301458-005A	01/17/13 3:28 PM	01/24/13	01/24/13 7:29 PM	1301458-006A	01/17/13 4:10 PM	01/24/13	01/24/13 8:10 PM
1301458-006A	01/17/13 4:10 PM	01/25/13	01/25/13 11:42 AM	1301458-008A	01/18/13 9:31 AM	01/24/13	01/24/13 8:50 PM
1301458-009A	01/18/13 9:54 AM	01/24/13	01/24/13 9:31 PM	1301458-010A	01/18/13 10:35 AM	01/22/13	01/22/13 7:22 PM
1301458-011A	01/18/13 11:19 AM	01/22/13	01/22/13 8:03 PM	1301458-012A	01/18/13 12:00 PM	01/22/13	01/22/13 6:41 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

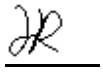
% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644


QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/18/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Reported: 01/28/13
Walnut Creek, CA 94596	Client P.O.:	Date Completed: 01/28/13

WorkOrder: 1301460

January 28, 2013

Dear Dawan:

Enclosed within are:

1) The results of the **1** analyzed sample from your project: **#13452-92207.TK29.SG2; Sherwin Williams,**
2) QC data for the above sample, and
3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

1301460

McCAMPBELL ANALYTICAL INC.

1534 WILLOW PASS ROAD / PITTSBURG, CA 94565-1701
Website: www.mccampbell.com / Email: main@mccampbell.com
Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY
STANDARD
EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Pawan Sharma Bill To: Pawan Sharma
Company: CDM Smith
E-Mail: sharmapk@cdmsmith.com
Tele: (925) 933 2900 Fax: ( )
Project #: 13452-92207.TK29.562 Project Name: Sherwin Williams
Project Location: Emeryville, CA
Sampler Signature: Stephen Mypel

Lab Use Only

Pressurized By	Date	Pressurization Gas N2	Pressurization Gas He

Helium Shroud SN#:
Other:
Notes: ASTM D-1946 Special ~~report Helium~~ canceled per S.M. carbon dioxide, methane

Field Sample ID (Location)	Collection Date	Collection Time	Canister SN#	Manifold / Sampler Kit SN#	Analysis Requested	~~Indoor~~ Air Outdoor	Soil Gas	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
AMBIENT-20130118	1/18/2013	0710	CAN2711-554	SK3620-537	TO-15, ASTM D-1946	X		-28.5	-8.0		

Relinquished By:	Date:	Time:	Received By:
	1/18/13	1715	1/18/13 17:15
Relinquished By:	Date:	Time:	Received By:
	1/18/13	18:30	
Relinquished By:	Date:	Time:	Received By:

Temp (°C): ____ Work Order #: ____
Equipment Condition: ____
Shipped Via: ____

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1301460 **ClientCode: CDM**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Dawan Sharma
CDM Smith
100 Pringle Avenue Ste. 300
Walnut Creek, CA 94596
(925) 933- 2900 FAX: (925) 933-4174

Email: sharmapk@cdm.com
cc:
PO:
ProjectNo: #13452-92207.TK29.SG2; Sherwin Williams

Bill to:
Michael Zafer
CDM Smith
100 Pringle Avenue Ste. 300
Walnut Creek, CA 94596
SEND HARCOPY

Requested TAT: 5 days

Date Received: **01/18/2013**
Date Printed: **01/18/2013**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1301460-001	Ambient-2013018	Indoor Air	1/18/2013 7:10	☐	A	A										

Test Legend:

1	ATMOSPHERICGAS_INDOOI	2	TO15_INDOOR(UG/M3)	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Zoraida Cortez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name: **CDM Smith**

Date and Time Received: **1/18/2013 9:47:02 PM**

Project Name: **#13452-92207.TK29.SG2; Sherwin Williams**

LogIn Reviewed by: Zoraida Cortez

WorkOrder N°: **1301460** Matrix: Indoor Air

Carrier: Courier

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp:		NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☐	No ☑	

** NOTE: If the "No" box is checked, see comments below.*

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith 100 Pringle Avenue Ste. 300 Walnut Creek, CA 94596	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Dawan Sharma	Date Reported: 01/28/13
	Client P.O.:	Date Completed: 01/28/13

Work Order: 1301460

January 29, 2013

CASE NARRATIVE REGARDING TO-15 ANALYSIS

All summa canisters are EVACUATED 5 days after the reporting of the results. Please call or email if a longer retention time is required.

In an effort to attain the lowest reporting limits possible for the majority of the TO-15 target list, high level compounds may be analyzed using EPA Method 8260B.

Polymer (Tedlar) bags are not recommended for TO15 samples. The disadvantages are listed in Appendix B of the DTSC Advisory of April 2012.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith 100 Pringle Avenue Ste. 300 Walnut Creek, CA 94596	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/18/13
		Date Received: 01/18/13
	Client Contact: Dawan Sharma	Date Extracted: 01/24/13
	Client P.O.:	Date Analyzed: 01/24/13

Light Gases, Atmospheric*

Extraction Method: ASTM D 1946-90 | Analytical Method: ASTM D 1946-90 | Work Order: 1301460

Lab ID	1301460-001A				Reporting Limit for DF =1		
Client ID	Ambient-20130118						
Matrix	Indoor Air						
Initial Pressure (psia)	10.24						
Final Pressure (psia)	16.00						
DF	1					Indoor Air	W
Compound	**Concentration**					µL/L	ug/L
Carbon Dioxide	410					20	NA
Methane	1.8					1.0	NA
Surrogate Recoveries (%)							
%SS:	N/A						
Comments							

* vapor samples are reported in µL/L.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: #13452-92207.TK29.SG2; Sherwin Williams	Date Sampled: 01/18/13
		Date Received: 01/18/13
100 Pringle Avenue Ste. 300	Client Contact: Dawan Sharma	Date Extracted: 01/28/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 01/28/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1301460

Lab ID	1301460-001A	Initial Pressure (psia)	10.24
Client ID	Ambient-20130118	Final Pressure (psia)	16.00
Matrix	Indoor Air		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<19	1.0	12	Acrylonitrile	ND<0.34	1.0	0.22
tert-Amyl methyl ether (TAME)	ND<0.66	1.0	0.42	Benzene	1.3	1.0	0.32
Benzyl chloride	ND<0.83	1.0	0.53	Bromodichloromethane	ND<1.1	1.0	0.7
Bromoform	ND<1.7	1.0	1.1	Bromomethane	ND<0.61	1.0	0.39
1,3-Butadiene	ND<0.34	1.0	0.22	2-Butanone (MEK)	ND<47	1.0	30
t-Butyl alcohol (TBA)	ND<9.7	1.0	6.2	Carbon Disulfide	ND<0.50	1.0	0.32
Carbon Tetrachloride	ND<1.0	1.0	0.64	Chlorobenzene	ND<0.73	1.0	0.47
Chloroethane	ND<0.42	1.0	0.27	Chloroform	ND<0.77	1.0	0.49
Chloromethane	ND<0.33	1.0	0.21	Cyclohexane	ND<55	1.0	35
Dibromochloromethane	ND<1.4	1.0	0.87	1,2-Dibromo-3-chloropropane	ND<1.5	1.0	0.98
1,2-Dibromoethane (EDB)	ND<1.2	1.0	0.78	1,2-Dichlorobenzene	ND<0.95	1.0	0.61
1,3-Dichlorobenzene	ND<0.95	1.0	0.61	1,4-Dichlorobenzene	ND<0.95	1.0	0.61
Dichlorodifluoromethane	2.4	1.0	0.5	1,1-Dichloroethane	ND<0.64	1.0	0.41
1,2-Dichloroethane (1,2-DCA)	ND<0.64	1.0	0.41	1,1-Dichloroethene	ND<0.62	1.0	0.4
cis-1,2-Dichloroethene	ND<0.62	1.0	0.4	trans-1,2-Dichloroethene	ND<0.62	1.0	0.4
1,2-Dichloropropane	ND<0.73	1.0	0.47	cis-1,3-Dichloropropene	ND<0.72	1.0	0.46
trans-1,3-Dichloropropene	ND<0.72	1.0	0.46	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND<1.1	1.0	0.71
Diisopropyl ether (DIPE)	ND<0.66	1.0	0.42	1,4-Dioxane	ND<0.58	1.0	0.37
Ethyl acetate	ND<1.4	1.0	0.92	Ethyl tert-butyl ether (ETBE)	ND<0.66	1.0	0.42
Ethylbenzene	ND<0.69	1.0	0.44	4-Ethyltoluene	ND<0.78	1.0	0.5
Freon 113	ND<1.2	1.0	0.78	Heptane	ND<66	1.0	42
Hexachlorobutadiene	ND<1.7	1.0	1.1	Hexane	ND<56	1.0	36
2-Hexanone	ND<66	1.0	42	4-Methyl-2-pentanone (MIBK)	ND<0.66	1.0	0.42
Methyl-t-butyl ether (MTBE)	ND<0.58	1.0	0.37	Methylene chloride	1.4	1.0	0.35
4-Phenylcyclohexene	ND<10	1.0	6.6	Naphthalene	ND<8.3	1.0	5.3
Propene	ND<28	1.0	18	Styrene	ND<0.67	1.0	0.43
1,1,1,2-Tetrachloroethane	ND<1.1	1.0	0.7	1,1,2,2-Tetrachloroethane	ND<1.1	1.0	0.7
Tetrachloroethene	ND<1.1	1.0	0.69	Tetrahydrofuran	ND<0.94	1.0	0.6
Toluene	3.5	1.0	0.38	1,2,4-Trichlorobenzene	ND<1.2	1.0	0.75
1,1,1-Trichloroethane	ND<0.86	1.0	0.55	1,1,2-Trichloroethane	ND<0.86	1.0	0.55
Trichloroethene	ND<0.86	1.0	0.55	Trichlorofluoromethane	1.9	1.0	0.57
1,2,4-Trimethylbenzene	ND<0.78	1.0	0.5	1,3,5-Trimethylbenzene	ND<0.78	1.0	0.5
Vinyl Acetate	ND<56	1.0	36	Vinyl Chloride	ND<0.41	1.0	0.26
Xylenes, Total	3.0	1.0	1.3				

Surrogate Recoveries (%)

%SS1:	88	%SS2:	99
%SS3:	79		

Comments: a21

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a21) reporting limit raised due to insufficient pressure in canister

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR ASTM D 1946-90

W.O. Sample Matrix: Indoor Air | QC Matrix: Air | BatchID: 74223 | WorkOrder: 1301460

EPA Method: ASTM D 1946-90 **Extraction: ASTM D 1946-90** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µL/L	µL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Carbon Dioxide	N/A	100	N/A	N/A	N/A	89	N/A	N/A	70 - 130
Methane	N/A	100	N/A	N/A	N/A	71.1	N/A	N/A	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 74223 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301460-001A	01/18/13 7:10 AM	01/24/13	01/24/13 4:15 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Indoor Air | QC Matrix: Soilgas | BatchID: 74299 | WorkOrder: 1301460

EPA Method: TO15 | **Extraction: TO15** | **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Acrylonitrile	N/A	25	N/A	N/A	N/A	103	N/A	N/A	60 - 140
tert-Amyl methyl ether (TAME)	N/A	25	N/A	N/A	N/A	103	N/A	N/A	60 - 140
Benzene	N/A	25	N/A	N/A	N/A	99.5	N/A	N/A	60 - 140
Benzyl chloride	N/A	25	N/A	N/A	N/A	121	N/A	N/A	60 - 140
Bromodichloromethane	N/A	25	N/A	N/A	N/A	112	N/A	N/A	60 - 140
Bromoform	N/A	25	N/A	N/A	N/A	110	N/A	N/A	60 - 140
Carbon Disulfide	N/A	25	N/A	N/A	N/A	112	N/A	N/A	60 - 140
Carbon Tetrachloride	N/A	25	N/A	N/A	N/A	133	N/A	N/A	60 - 140
Chlorobenzene	N/A	25	N/A	N/A	N/A	91.1	N/A	N/A	60 - 140
Chloroethane	N/A	25	N/A	N/A	N/A	127	N/A	N/A	60 - 140
Chloroform	N/A	25	N/A	N/A	N/A	98.1	N/A	N/A	60 - 140
Chloromethane	N/A	25	N/A	N/A	N/A	118	N/A	N/A	60 - 140
Dibromochloromethane	N/A	25	N/A	N/A	N/A	122	N/A	N/A	60 - 140
1,2-Dibromo-3-chloropropane	N/A	25	N/A	N/A	N/A	126	N/A	N/A	60 - 140
1,2-Dibromoethane (EDB)	N/A	25	N/A	N/A	N/A	103	N/A	N/A	60 - 140
1,3-Dichlorobenzene	N/A	25	N/A	N/A	N/A	94.2	N/A	N/A	60 - 140
1,4-Dichlorobenzene	N/A	25	N/A	N/A	N/A	91.3	N/A	N/A	60 - 140
Dichlorodifluoromethane	N/A	25	N/A	N/A	N/A	104	N/A	N/A	60 - 140
1,1-Dichloroethane	N/A	25	N/A	N/A	N/A	94.5	N/A	N/A	60 - 140
1,2-Dichloroethane (1,2-DCA)	N/A	25	N/A	N/A	N/A	93.3	N/A	N/A	60 - 140
cis-1,2-Dichloroethene	N/A	25	N/A	N/A	N/A	104	N/A	N/A	60 - 140
trans-1,2-Dichloroethene	N/A	25	N/A	N/A	N/A	103	N/A	N/A	60 - 140
1,2-Dichloropropane	N/A	25	N/A	N/A	N/A	99.6	N/A	N/A	60 - 140
cis-1,3-Dichloropropene	N/A	25	N/A	N/A	N/A	117	N/A	N/A	60 - 140
trans-1,3-Dichloropropene	N/A	25	N/A	N/A	N/A	113	N/A	N/A	60 - 140
1,2-Dichloro-1,1,2,2-tetrafluoroethane	N/A	25	N/A	N/A	N/A	110	N/A	N/A	60 - 140
Diisopropyl ether (DIPE)	N/A	25	N/A	N/A	N/A	111	N/A	N/A	60 - 140
1,4-Dioxane	N/A	25	N/A	N/A	N/A	105	N/A	N/A	60 - 140
Ethyl acetate	N/A	25	N/A	N/A	N/A	92.6	N/A	N/A	60 - 140
Ethyl tert-butyl ether (ETBE)	N/A	25	N/A	N/A	N/A	106	N/A	N/A	60 - 140
Ethylbenzene	N/A	25	N/A	N/A	N/A	87.1	N/A	N/A	60 - 140

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Indoor Air | QC Matrix: Soilgas | BatchID: 74299 | WorkOrder: 1301460

EPA Method: TO15 | **Extraction: TO15** | **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Freon 113	N/A	25	N/A	N/A	N/A	106	N/A	N/A	60 - 140
Hexachlorobutadiene	N/A	25	N/A	N/A	N/A	86.4	N/A	N/A	60 - 140
4-Methyl-2-pentanone (MIBK)	N/A	25	N/A	N/A	N/A	87.3	N/A	N/A	60 - 140
Methyl-t-butyl ether (MTBE)	N/A	25	N/A	N/A	N/A	122	N/A	N/A	60 - 140
Methylene chloride	N/A	25	N/A	N/A	N/A	105	N/A	N/A	60 - 140
Naphthalene	N/A	25	N/A	N/A	N/A	88.7	N/A	N/A	60 - 140
Styrene	N/A	25	N/A	N/A	N/A	91	N/A	N/A	60 - 140
1,1,1,2-Tetrachloroethane	N/A	25	N/A	N/A	N/A	113	N/A	N/A	60 - 140
1,1,2,2-Tetrachloroethane	N/A	25	N/A	N/A	N/A	87	N/A	N/A	60 - 140
Tetrachloroethene	N/A	25	N/A	N/A	N/A	125	N/A	N/A	60 - 140
Tetrahydrofuran	N/A	25	N/A	N/A	N/A	86.8	N/A	N/A	60 - 140
Toluene	N/A	25	N/A	N/A	N/A	113	N/A	N/A	60 - 140
1,2,4-Trichlorobenzene	N/A	25	N/A	N/A	N/A	92	N/A	N/A	60 - 140
1,1,1-Trichloroethane	N/A	25	N/A	N/A	N/A	113	N/A	N/A	60 - 140
1,1,2-Trichloroethane	N/A	25	N/A	N/A	N/A	100	N/A	N/A	60 - 140
Trichloroethene	N/A	25	N/A	N/A	N/A	109	N/A	N/A	60 - 140
1,2,4-Trimethylbenzene	N/A	25	N/A	N/A	N/A	93.1	N/A	N/A	60 - 140
1,3,5-Trimethylbenzene	N/A	25	N/A	N/A	N/A	86.5	N/A	N/A	60 - 140
Vinyl Chloride	N/A	25	N/A	N/A	N/A	92.8	N/A	N/A	60 - 140
%SS1:	N/A	500	N/A	N/A	N/A	94	N/A	N/A	60 - 140
%SS2:	N/A	500	N/A	N/A	N/A	100	N/A	N/A	60 - 140
%SS3:	N/A	500	N/A	N/A	N/A	78	N/A	N/A	60 - 140

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 74299 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1301460-001A	01/18/13 7:10 AM	01/28/13	01/28/13 5:46 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644


QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Reported: 06/12/13
Walnut Creek, CA 94596	Client P.O.:	Date Completed: 06/12/13

WorkOrder: 1306077

June 13, 2013

Dear Pawan:

Enclosed within are:

1) The results of the **14** analyzed samples from your project: **Sherwin Williams,**
2) QC data for the above samples, and
3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

1306077

McCAMPBELL ANALYTICAL INC.
1534 WILLOW PASS ROAD / PITTSBURG, CA 94565-1701
Website: www.mccampbell.com / Email: main@mccampbell.com
Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

Standard

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY

EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Pawan Sharma	Bill To: Pawan Sharma
Company: CDM Smith	
	E-Mail: sharmapk@cdmsmith.com
Tele: (925) 933-2900	Fax: ( )
Project #:	Project Name: Sherwin Williams
Project Location: Emeryville, CA	
Sampler Signature:	

Lab Use Only

Pressurized By	Date	Pressurization Gas N2	Pressurization Gas He

Helium Shroud SN#: Subcontractor's shroud used.

Other:

Notes: ASTM D-1946 Special rpt for helium, carbon dioxide, methane, Oxygen

* CAN 6200-744 had insufficient vacuum (22 inHg) any not used

Field Sample ID (Location)	Collection Date	Collection Time	Canister SN#	Manifold / Sampler Kit SN#	Analysis Requested	Indoor Air	Soil Gas	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
SGMP-12 -20130603	6/3/13	0847	CAN5803-734	man 316T-992	TO-15, ASTM D-1946		✓	~~-29.5~~ ~~-5~~			
SGMP-10 -20130603		1006	CAN5800-731	man316T-998				-29.5	-5		
SGMP-10D -20130603		1006	CAN6421-852	man316T-998				-29.5	-5		
SGMP-11 -20130603		1109	CAN5806-737	man316-825				-30	-5		
SGMP-04 -20130603		1205	CAN6410-797	man316-765				-30	-5		
SGMP-05 -20130603		1256	CAN6307-787	man316T-776				-30	-5		
SGMP-06 -20130603		1341	CAN7531-879	man316-819				-30	-5		
SGMP-08 -20130603		1419	CAN5808-739	man316-826				-30	-5		
SGMP-07 -20130603		1504	CAN7508-856	man316T-993				-30	-3.5		
SGMP-03 -20130603		1609	CAN6302-782	man316T-780				-30	-5		

Relinquished By:	Date:	Time:	Received By:
	6/4/13	1045	
	6/3/13	1825	
Relinquished By:	Date:	Time:	Received By:
	6/4/13	1645	
Relinquished By:	Date:	Time:	Received By:

Temp (°C): N/a. Work Order #: 1306077

Equipment Condition: 0000A

Shipped Via: Mai courier

McCAMPBELL ANALYTICAL INC.
1534 WILLOW PASS ROAD / PITTSBURG, CA 94565-1701
Website: www.mccampbell.com / Email: main@mccampbell.com
Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

Standard

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY

EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Pawan Sharma	Bill To: Pawan Sharma
Company: CDM Smith	
	E-Mail: SharmaPK@cdmsmith.com
Tele: (925) 933-2900	Fax: ( )
Project #:	Project Name: Sherwin Williams
Project Location: Emeryville, CA	
Sampler Signature:	

Lab Use Only

Pressurized By	Date	Pressurization Gas N2	Pressurization Gas He

Helium Shroud SN#: Subcontractor's Shroud used

Other:

Notes: ASTM D-1946 Speciation report for helium, carbon dioxide, methane, oxygen

Field Sample ID (Location)	Collection Date	Collection Time	Canister SN#	Manifold / Sampler Kit SN#	Analysis Requested	Indoor Air	Soil Gas	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	Canister Pressure/Vacuum Receipt	Canister Pressure/Vacuum Final (psi)
SGMP-02-20130603	6/3/13	1702	CAN1409-716	man316-681	TO-15, ASTM D-1946		✓	-30	-5		
SGMP-01-20130603	6/3/13	1732	CAN6406-793	man316T-779	"		✓	-29.5	-5		
SGMP-09-20130603	6/3/13	1804	CAN5802-733	man316T-997	"		✓	-30	-5		
TB-20130603	6/3/13	—	CAN6311-791	—	"			—	—		

Relinquished By:	Date: 6/4/13	Time: 1048	Received By:
	6/3/13	1828	
Relinquished By:	Date: 6/4/13	Time: 1649	Received By:
Relinquished By:	Date:	Time:	Received By:

Temp (°C): _____ Work Order #: _____

Equipment Condition: _____

Shipped Via: _____

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1306077 **ClientCode: CDM**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Pawan Sharma
CDM Smith
100 Pringle Avenue Ste. 300
Walnut Creek, CA 94596
(925) 933- 2900 FAX: (925) 933-4174

Email: sharmapk@cdm.com
cc:
PO:
ProjectNo: Sherwin Williams

Bill to:
Michael Zafer
CDM Smith
100 Pringle Avenue Ste. 300
Walnut Creek, CA 94596
SEND HARCOPY

Requested TAT: 5 days

Date Received: **06/04/2013**
Date Printed: **06/11/2013**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1306077-001	SGMP-12-20130603	Soil Gas	6/3/2013 8:47	☐	A	A										
1306077-002	SGMP-10-20130603	Soil Gas	6/3/2013 10:06	☐	A	A										
1306077-003	SGMP-10D-20130603	Soil Gas	6/3/2013 10:06	☐	A	A										
1306077-004	SGMP-11-20130603	Soil Gas	6/3/2013 11:09	☐	A	A										
1306077-005	SGMP-04-20130603	Soil Gas	6/3/2013 12:05	☐	A	A										
1306077-006	SGMP-05-20130603	Soil Gas	6/3/2013 12:56	☐	A	A										
1306077-007	SGMP-06-20130603	Soil Gas	6/3/2013 13:41	☐	A	A										
1306077-008	SGMP-08-20130603	Soil Gas	6/3/2013 14:19	☐	A	A										
1306077-009	SGMP-07-20130603	Soil Gas	6/3/2013 15:04	☐	A	A										
1306077-010	SGMP-03-20130603	Soil Gas	6/3/2013 16:09	☐	A	A										
1306077-011	SGMP-02-20130603	Soil Gas	6/3/2013 17:02	☐	A	A										
1306077-012	SGMP-01-20130603	Soil Gas	6/3/2013 17:32	☐	A	A										
1306077-013	SGMP-09-20130603	Soil Gas	6/3/2013 18:04	☐	A	A										
1306077-014	TB-20130603	Soil Gas	6/3/2013	☐	A	A										

Test Legend:

1	LG_SUMMA_SOILGAS	2	TO15_SOIL(UG/M3)	3		4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A, 013A, 014A contain testgroup.

Prepared by: Rosa Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name: **CDM Smith**

Date and Time Received: **6/4/2013 4:45:00 PM**

Project Name: **Sherwin Williams**

LogIn Reviewed by: Rosa Venegas

WorkOrder N°: **1306077** Matrix: Soil Gas

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp:		NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☐	No ☑	

** NOTE: If the "No" box is checked, see comments below.*

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith 100 Pringle Avenue Ste. 300 Walnut Creek, CA 94596	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
	Client Contact: Pawan Sharma	Date Reported: 06/12/13
	Client P.O.:	Date Completed: 06/12/13

Work Order: 1306077

June 13, 2013

CASE NARRATIVE REGARDING TO-15 ANALYSIS

All summa canisters are EVACUATED 5 days after the reporting of the results. Please call or email if a longer retention time is required.

In an effort to attain the lowest reporting limits possible for the majority of the TO-15 target list, high level compounds may be analyzed using EPA Method 8260B.

Polymer (Tedlar) bags are not recommended for TO15 samples. The disadvantages are listed in Appendix B of the DTSC Advisory of April 2012.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/10/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/10/13

Helium*

Extraction method: ASTM D 1946-90 Analytical methods: ASTM D 1946-90 Work Order: 1306077

Lab ID	Client ID	Matrix	Initial Pressure	Final Pressure	Helium	DF	% SS	Comments
001A	SGMP-12-20130603	Soil Gas	12.45	24.84	0.12	1	N/A	
002A	SGMP-10-20130603	Soil Gas	12.35	24.60	0.11	1	N/A	
003A	SGMP-10D-20130603	Soil Gas	12.39	24.68	0.17	1	N/A	
004A	SGMP-11-20130603	Soil Gas	12.86	25.63	0.26	1	N/A	
005A	SGMP-04-20130603	Soil Gas	12.48	24.89	0.22	1	N/A	
006A	SGMP-05-20130603	Soil Gas	12.64	25.22	0.042	1	N/A	
007A	SGMP-06-20130603	Soil Gas	12.31	24.58	0.15	1	N/A	
008A	SGMP-08-20130603	Soil Gas	12.82	25.55	0.32	1	N/A	
009A	SGMP-07-20130603	Soil Gas	12.88	25.69	0.10	1	N/A	
010A	SGMP-03-20130603	Soil Gas	13.62	27.18	0.010	1	N/A	
011A	SGMP-02-20130603	Soil Gas	12.78	25.46	0.14	1	N/A	
012A	SGMP-01-20130603	Soil Gas	12.37	24.64	0.077	1	N/A	
013A	SGMP-09-20130603	Soil Gas	12.56	25.06	0.15	1	N/A	
014A	TB-20130603	Soil Gas	1.00	1.00	ND	1	N/A	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	psia	psia	NA	NA
	SoilGas	psia	psia	0.005	%

* vapor samples are reported in %.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor

DHS ELAP Certification 1644 BB Analyst's Initial Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/11/13-06/12/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/11/13-06/12/13

Light Gases*

Extraction Method: ASTM D 1946-90 | Analytical Method: ASTM D 1946-90 | Work Order: 1306077

Lab ID	1306077-001A	1306077-002A	1306077-003A	1306077-004A	Reporting Limit for DF =1 and Pressure Ratio (Final/Initial) = 2	
Client ID	SGMP-12-20130603	SGMP-10-20130603	SGMP-10D-20130603	SGMP-11-20130603		
Matrix	Soil Gas	Soil Gas	Soil Gas	Soil Gas		
Initial Pressure (psia)	12.45	12.35	12.39	12.86		
Final Pressure (psia)	24.84	24.60	24.68	25.63		
DF	1	1	1	1	Soil Gas	W
Compound	**Concentration**				µL/L	ug/L
Carbon Dioxide		190,000	200,000	370,000	50	NA
Methane	2400	370	300	2400	1.0	NA
Oxygen	7200	11,000	8600	6800	4000	NA
Surrogate Recoveries (%)						
%SS:	N/A	N/A	N/A	N/A		
Comments						

* soil vapor samples are reported in µL/L.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

DHS ELAP Certification 1644 BB Analyst's Initial Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/11/13-06/12/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/11/13-06/12/13

Light Gases*

Extraction Method: ASTM D 1946-90 | Analytical Method: ASTM D 1946-90 | Work Order: 1306077

Lab ID	1306077-005A	1306077-006A	1306077-007A	1306077-008A	Reporting Limit for DF =1 and Pressure Ratio (Final/Initial) = 2	
Client ID	SGMP-04-20130603	SGMP-05-20130603	SGMP-06-20130603	SGMP-08-20130603		
Matrix	Soil Gas	Soil Gas	Soil Gas	Soil Gas		
Initial Pressure (psia)	12.48	12.64	12.31	12.82		
Final Pressure (psia)	24.89	25.22	24.58	25.55		
DF	1	1	1	1	Soil Gas	W
Compound	**Concentration**				µL/L	ug/L
Carbon Dioxide	50,000	170,000	39,000	44,000	50	NA
Methane	17	370	81	33	1.0	NA
Oxygen	160,000	39,000	160,000	160,000	4000	NA
Surrogate Recoveries (%)						
%SS:	N/A	N/A	N/A	N/A		
Comments						

* soil vapor samples are reported in µL/L.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

DHS ELAP Certification 1644 BB Analyst's Initial  Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/11/13-06/12/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/11/13-06/12/13

Light Gases*

Extraction Method: ASTM D 1946-90 | Analytical Method: ASTM D 1946-90 | Work Order: 1306077

Lab ID	1306077-009A	1306077-010A	1306077-011A	1306077-012A	Reporting Limit for DF =1 and Pressure Ratio (Final/Initial) = 2	
Client ID	SGMP-07-20130603	SGMP-03-20130603	SGMP-02-20130603	SGMP-01-20130603		
Matrix	Soil Gas	Soil Gas	Soil Gas	Soil Gas		
Initial Pressure (psia)	12.88	13.62	12.78	12.37		
Final Pressure (psia)	25.69	27.18	25.46	24.64		
DF	1	1	1	1	Soil Gas	W
Compound	**Concentration**				µL/L	ug/L
Carbon Dioxide	250,000	250,000	72,000	160	50	NA
Methane	78,000	490,000	530	5.4	1.0	NA
Oxygen	7200	ND	130,000	170,000	4000	NA
Surrogate Recoveries (%)						
%SS:	N/A	N/A	N/A	N/A		
Comments						

* soil vapor samples are reported in µL/L.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

DHS ELAP Certification 1644 BB Analyst's Initial AR Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/11/13-06/12/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/11/13-06/12/13

Light Gases*

Extraction Method: ASTM D 1946-90 | Analytical Method: ASTM D 1946-90 | Work Order: 1306077

Lab ID	1306077-013A	1306077-014A			Reporting Limit for DF =1 and Pressure Ratio (Final/Initial) = 2	
Client ID	SGMP-09-20130603	TB-20130603				
Matrix	Soil Gas	Soil Gas				
Initial Pressure (psia)	12.56	1.00				
Final Pressure (psia)	25.06	1.00				
DF	1	1			Soil Gas	W
Compound	**Concentration**				µL/L	ug/L
Carbon Dioxide	1500	ND			50	NA
Methane	5.2	ND			1.0	NA
Oxygen	15,000	ND			4000	NA
Surrogate Recoveries (%)						
%SS:	N/A	N/A				
Comments						

* soil vapor samples are reported in µL/L.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

DHS ELAP Certification 1644 BB Analyst's Initial AR Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/07/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/07/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-001A	Initial Pressure (psia)	12.45
Client ID	SGMP-12-20130603	Final Pressure (psia)	24.84
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	88	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	25	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	110	%SS2:	107
%SS3:	111		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/07/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/07/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-002A	Initial Pressure (psia)	12.35
Client ID	SGMP-10-20130603	Final Pressure (psia)	24.60
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	6.8	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	33	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	35	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	108	%SS2:	108
%SS3:	106		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/07/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/07/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-003A	Initial Pressure (psia)	12.39
Client ID	SGMP-10D-20130603	Final Pressure (psia)	24.68
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	6.9	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	21	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	35	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	117	%SS2:	108
%SS3:	105		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/07/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/07/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-004A	Initial Pressure (psia)	12.86
Client ID	SGMP-11-20130603	Final Pressure (psia)	25.63
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	6.7	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	46	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	107	%SS2:	107
%SS3:	107		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/07/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/07/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-005A	Initial Pressure (psia)	12.48
Client ID	SGMP-04-20130603	Final Pressure (psia)	24.89
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	ND	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	108	%SS2:	108
%SS3:	106		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/07/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/07/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-006A	Initial Pressure (psia)	12.64
Client ID	SGMP-05-20130603	Final Pressure (psia)	25.22
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	12	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	107	%SS2:	107
%SS3:	105		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/12/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/12/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-007A	Initial Pressure (psia)	12.31
Client ID	SGMP-06-20130603	Final Pressure (psia)	24.58
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<480	4.0	120	Acrylonitrile	ND<18	4.0	4.4
tert-Amyl methyl ether (TAME)	ND<34	4.0	8.5	Benzene	ND<26	4.0	6.5
Benzyl chloride	ND<44	4.0	11	Bromodichloromethane	ND<56	4.0	14
Bromoform	ND<84	4.0	21	Bromomethane	ND<32	4.0	7.9
1,3-Butadiene	ND<18	4.0	4.5	2-Butanone (MEK)	ND<600	4.0	150
t-Butyl alcohol (TBA)	ND<250	4.0	62	Carbon Disulfide	ND<25	4.0	6.3
Carbon Tetrachloride	ND<52	4.0	13	Chlorobenzene	56	4.0	9.4
Chloroethane	ND<22	4.0	5.4	Chloroform	ND<40	4.0	9.9
Chloromethane	ND<17	4.0	4.2	Cyclohexane	ND<720	4.0	180
Dibromochloromethane	ND<68	4.0	17	1,2-Dibromo-3-chloropropane	ND<80	4.0	20
1,2-Dibromoethane (EDB)	ND<64	4.0	16	1,2-Dichlorobenzene	ND<48	4.0	12
1,3-Dichlorobenzene	ND<48	4.0	12	1,4-Dichlorobenzene	ND<48	4.0	12
Dichlorodifluoromethane	ND<40	4.0	10	1,1-Dichloroethane	ND<33	4.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND<33	4.0	8.2	1,1-Dichloroethene	ND<32	4.0	8.1
cis-1,2-Dichloroethene	ND<32	4.0	8.1	trans-1,2-Dichloroethene	ND<32	4.0	8.1
1,2-Dichloropropane	ND<38	4.0	9.4	cis-1,3-Dichloropropene	ND<37	4.0	9.2
trans-1,3-Dichloropropene	ND<37	4.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND<56	4.0	14
Diisopropyl ether (DIPE)	ND<34	4.0	8.5	1,4-Dioxane	ND<29	4.0	7.3
Ethanol	ND<380	4.0	96	Ethyl acetate	ND<76	4.0	19
Ethyl tert-butyl ether (ETBE)	ND<34	4.0	8.5	Ethylbenzene	64	4.0	8.8
4-Ethyltoluene	ND<40	4.0	10	Freon 113	ND<64	4.0	16
Heptane	ND<840	4.0	210	Hexachlorobutadiene	ND<88	4.0	22
Hexane	ND<720	4.0	180	2-Hexanone	ND<840	4.0	210
4-Methyl-2-pentanone (MIBK)	ND<33	4.0	8.3	Methyl-t-butyl ether (MTBE)	ND<29	4.0	7.3
Methylene chloride	ND<28	4.0	7.1	Naphthalene	ND<44	4.0	11
Propene	ND<350	4.0	88	Styrene	ND<34	4.0	8.6
1,1,1,2-Tetrachloroethane	ND<56	4.0	14	1,1,2,2-Tetrachloroethane	ND<56	4.0	14
Tetrachloroethene	ND<56	4.0	14	Tetrahydrofuran	ND<24	4.0	6.0
Toluene	ND<31	4.0	7.7	1,2,4-Trichlorobenzene	ND<60	4.0	15
1,1,1-Trichloroethane	ND<44	4.0	11	1,1,2-Trichloroethane	ND<44	4.0	11
Trichloroethene	ND<44	4.0	11	Trichlorofluoromethane	ND<44	4.0	11
1,2,4-Trimethylbenzene	ND<40	4.0	10	1,3,5-Trimethylbenzene	68	4.0	10
Vinyl Acetate	ND<720	4.0	180	Vinyl Chloride	ND<21	4.0	5.2
Xylenes, Total	ND<110	4.0	27				

Surrogate Recoveries (%)

%SS1:	101	%SS2:	98
%SS3:	99		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/07/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/07/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-008A	Initial Pressure (psia)	12.82
Client ID	SGMP-08-20130603	Final Pressure (psia)	25.55
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	76	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	112	%SS2:	108
%SS3:	105		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/11/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/11/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-009A	Initial Pressure (psia)	12.88
Client ID	SGMP-07-20130603	Final Pressure (psia)	25.69
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<9600	80	120	Acrylonitrile	ND<350	80	4.4
tert-Amyl methyl ether (TAME)	ND<680	80	8.5	Benzene	ND<520	80	6.5
Benzyl chloride	ND<880	80	11	Bromodichloromethane	ND<1100	80	14
Bromoform	ND<1700	80	21	Bromomethane	ND<630	80	7.9
1,3-Butadiene	ND<360	80	4.5	2-Butanone (MEK)	ND<12,000	80	150
t-Butyl alcohol (TBA)	ND<5000	80	62	Carbon Disulfide	ND<500	80	6.3
Carbon Tetrachloride	ND<1000	80	13	Chlorobenzene	ND<750	80	9.4
Chloroethane	ND<430	80	5.4	Chloroform	ND<790	80	9.9
Chloromethane	ND<340	80	4.2	Cyclohexane	ND<14,000	80	180
Dibromochloromethane	ND<1400	80	17	1,2-Dibromo-3-chloropropane	ND<1600	80	20
1,2-Dibromoethane (EDB)	ND<1300	80	16	1,2-Dichlorobenzene	ND<960	80	12
1,3-Dichlorobenzene	ND<960	80	12	1,4-Dichlorobenzene	ND<960	80	12
Dichlorodifluoromethane	ND<800	80	10	1,1-Dichloroethane	ND<660	80	8.2
1,2-Dichloroethane (1,2-DCA)	ND<660	80	8.2	1,1-Dichloroethene	ND<650	80	8.1
cis-1,2-Dichloroethene	ND<650	80	8.1	trans-1,2-Dichloroethene	ND<650	80	8.1
1,2-Dichloropropane	ND<750	80	9.4	cis-1,3-Dichloropropene	ND<740	80	9.2
trans-1,3-Dichloropropene	ND<740	80	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND<1100	80	14
Diisopropyl ether (DIPE)	ND<680	80	8.5	1,4-Dioxane	ND<580	80	7.3
Ethanol	ND<7700	80	96	Ethyl acetate	ND<1500	80	19
Ethyl tert-butyl ether (ETBE)	ND<680	80	8.5	Ethylbenzene	ND<700	80	8.8
4-Ethyltoluene	ND<800	80	10	Freon 113	ND<1300	80	16
Heptane	ND<17,000	80	210	Hexachlorobutadiene	ND<1800	80	22
Hexane	ND<14,000	80	180	2-Hexanone	ND<17,000	80	210
4-Methyl-2-pentanone (MIBK)	ND<660	80	8.3	Methyl-t-butyl ether (MTBE)	ND<580	80	7.3
Methylene chloride	ND<570	80	7.1	Naphthalene	ND<880	80	11
Propene	ND<7000	80	88	Styrene	ND<690	80	8.6
1,1,1,2-Tetrachloroethane	ND<1100	80	14	1,1,2,2-Tetrachloroethane	ND<1100	80	14
Tetrachloroethene	ND<1100	80	14	Tetrahydrofuran	ND<480	80	6.0
Toluene	ND<620	80	7.7	1,2,4-Trichlorobenzene	ND<1200	80	15
1,1,1-Trichloroethane	ND<880	80	11	1,1,2-Trichloroethane	ND<880	80	11
Trichloroethene	ND<880	80	11	Trichlorofluoromethane	ND<880	80	11
1,2,4-Trimethylbenzene	ND<800	80	10	1,3,5-Trimethylbenzene	ND<800	80	10
Vinyl Acetate	ND<14,000	80	180	Vinyl Chloride	ND<420	80	5.2
Xylenes, Total	ND<2200	80	27				

Surrogate Recoveries (%)

%SS1:	106	%SS2:	96
%SS3:	---#		

Comments: a3,c1

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/11/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/11/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-010A	Initial Pressure (psia)	13.62
Client ID	SGMP-03-20130603	Final Pressure (psia)	27.18
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<9600	80	120	Acrylonitrile	ND<350	80	4.4
tert-Amyl methyl ether (TAME)	ND<680	80	8.5	Benzene	ND<520	80	6.5
Benzyl chloride	ND<880	80	11	Bromodichloromethane	ND<1100	80	14
Bromoform	ND<1700	80	21	Bromomethane	ND<630	80	7.9
1,3-Butadiene	ND<360	80	4.5	2-Butanone (MEK)	ND<12,000	80	150
t-Butyl alcohol (TBA)	ND<5000	80	62	Carbon Disulfide	ND<500	80	6.3
Carbon Tetrachloride	ND<1000	80	13	Chlorobenzene	ND<750	80	9.4
Chloroethane	ND<430	80	5.4	Chloroform	ND<790	80	9.9
Chloromethane	ND<340	80	4.2	Cyclohexane	ND<14,000	80	180
Dibromochloromethane	ND<1400	80	17	1,2-Dibromo-3-chloropropane	ND<1600	80	20
1,2-Dibromoethane (EDB)	ND<1300	80	16	1,2-Dichlorobenzene	ND<960	80	12
1,3-Dichlorobenzene	ND<960	80	12	1,4-Dichlorobenzene	ND<960	80	12
Dichlorodifluoromethane	ND<800	80	10	1,1-Dichloroethane	ND<660	80	8.2
1,2-Dichloroethane (1,2-DCA)	ND<660	80	8.2	1,1-Dichloroethene	ND<650	80	8.1
cis-1,2-Dichloroethene	ND<650	80	8.1	trans-1,2-Dichloroethene	ND<650	80	8.1
1,2-Dichloropropane	ND<750	80	9.4	cis-1,3-Dichloropropene	ND<740	80	9.2
trans-1,3-Dichloropropene	ND<740	80	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND<1100	80	14
Diisopropyl ether (DIPE)	ND<680	80	8.5	1,4-Dioxane	ND<580	80	7.3
Ethanol	ND<7700	80	96	Ethyl acetate	ND<1500	80	19
Ethyl tert-butyl ether (ETBE)	ND<680	80	8.5	Ethylbenzene	ND<700	80	8.8
4-Ethyltoluene	ND<800	80	10	Freon 113	ND<1300	80	16
Heptane	ND<17,000	80	210	Hexachlorobutadiene	ND<1800	80	22
Hexane	ND<14,000	80	180	2-Hexanone	ND<17,000	80	210
4-Methyl-2-pentanone (MIBK)	ND<660	80	8.3	Methyl-t-butyl ether (MTBE)	ND<580	80	7.3
Methylene chloride	ND<570	80	7.1	Naphthalene	ND<880	80	11
Propene	ND<7000	80	88	Styrene	ND<690	80	8.6
1,1,1,2-Tetrachloroethane	ND<1100	80	14	1,1,2,2-Tetrachloroethane	ND<1100	80	14
Tetrachloroethene	ND<1100	80	14	Tetrahydrofuran	ND<480	80	6.0
Toluene	ND<620	80	7.7	1,2,4-Trichlorobenzene	ND<1200	80	15
1,1,1-Trichloroethane	ND<880	80	11	1,1,2-Trichloroethane	ND<880	80	11
Trichloroethene	ND<880	80	11	Trichlorofluoromethane	ND<880	80	11
1,2,4-Trimethylbenzene	ND<800	80	10	1,3,5-Trimethylbenzene	ND<800	80	10
Vinyl Acetate	ND<14,000	80	180	Vinyl Chloride	ND<420	80	5.2
Xylenes, Total	ND<2200	80	27				

Surrogate Recoveries (%)

%SS1:	102	%SS2:	99
%SS3:	103		

Comments: a3

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/07/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/07/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-011A	Initial Pressure (psia)	12.78
Client ID	SGMP-02-20130603	Final Pressure (psia)	25.46
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	9.6	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	19	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	18	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	111	%SS2:	98
%SS3:	98		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/07/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/07/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-012A	Initial Pressure (psia)	12.37
Client ID	SGMP-01-20130603	Final Pressure (psia)	24.64
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	150	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	ND	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	104	%SS2:	97
%SS3:	97		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/07/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/07/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-013A	Initial Pressure (psia)	12.56
Client ID	SGMP-09-20130603	Final Pressure (psia)	25.06
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	370	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	ND	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	29	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	105	%SS2:	99
%SS3:	98		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/07/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/07/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306077

Lab ID	1306077-014A	Initial Pressure (psia)	1.00
Client ID	TB-20130603	Final Pressure (psia)	1.00
Matrix	Soil Gas		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	19
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	ND	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes, Total	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	103	%SS2:	97
%SS3:	97		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

a3) sample diluted due to high organic content.
c1) surrogate recovery outside of the control limits due to dilution / matrix interference / coelution / presence of surrogate compound in the sample

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR ASTM D 1946-90

W.O. Sample Matrix: Soilgas | QC Matrix: Soilgas | BatchID: 78176 | WorkOrder: 1306077

EPA Method: ASTM D 1946-90 **Extraction: ASTM D 1946-90** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	%	%	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Helium	N/A	0.010	N/A	N/A	N/A	92.4	N/A	N/A	60 - 140

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 78176 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1306077-001A	06/03/13 8:47 AM	06/10/13	06/10/13 3:00 PM	1306077-002A	06/03/13 10:06 AM	06/10/13	06/10/13 3:13 PM
1306077-003A	06/03/13 10:06 AM	06/10/13	06/10/13 3:25 PM	1306077-004A	06/03/13 11:09 AM	06/10/13	06/10/13 3:38 PM
1306077-005A	06/03/13 12:05 PM	06/10/13	06/10/13 3:51 PM	1306077-006A	06/03/13 12:56 PM	06/10/13	06/10/13 4:04 PM
1306077-007A	06/03/13 1:41 PM	06/10/13	06/10/13 4:17 PM	1306077-008A	06/03/13 2:19 PM	06/10/13	06/10/13 4:45 PM
1306077-009A	06/03/13 3:04 PM	06/10/13	06/10/13 4:58 PM	1306077-010A	06/03/13 4:09 PM	06/10/13	06/10/13 5:11 PM
1306077-011A	06/03/13 5:02 PM	06/10/13	06/10/13 5:24 PM	1306077-012A	06/03/13 5:32 PM	06/10/13	06/10/13 5:36 PM
1306077-013A	06/03/13 6:04 PM	06/10/13	06/10/13 5:49 PM	1306077-014A	06/03/13	06/10/13	06/10/13 6:02 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR ASTM D 1946-90

W.O. Sample Matrix: SoilGas | QC Matrix: SoilGas | BatchID: 78218 | WorkOrder: 1306077

EPA Method: ASTM D 1946-90 **Extraction: ASTM D 1946-90** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µL/L	µL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Carbon Dioxide	N/A	50	N/A	N/A	N/A	93	N/A	N/A	70 - 130
Methane	N/A	50	N/A	N/A	N/A	79.3	N/A	N/A	70 - 130
Oxygen	N/A	7000	N/A	N/A	N/A	87.9	N/A	N/A	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 78218 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1306077-001A	06/03/13 8:47 AM	06/11/13	06/11/13 3:00 PM	1306077-001A	06/03/13 8:47 AM	06/11/13	06/11/13 3:11 PM
1306077-001A	06/03/13 8:47 AM	06/11/13	06/11/13 5:33 PM	1306077-002A	06/03/13 10:06 AM	06/11/13	06/11/13 5:43 PM
1306077-002A	06/03/13 10:06 AM	06/11/13	06/11/13 5:43 PM	1306077-002A	06/03/13 10:06 AM	06/12/13	06/12/13 1:51 PM
1306077-003A	06/03/13 10:06 AM	06/11/13	06/11/13 3:53 PM	1306077-003A	06/03/13 10:06 AM	06/11/13	06/11/13 3:53 PM
1306077-003A	06/03/13 10:06 AM	06/11/13	06/11/13 5:54 PM	1306077-004A	06/03/13 11:09 AM	06/11/13	06/11/13 4:03 PM
1306077-004A	06/03/13 11:09 AM	06/11/13	06/11/13 4:14 PM	1306077-004A	06/03/13 11:09 AM	06/11/13	06/11/13 6:04 PM
1306077-005A	06/03/13 12:05 PM	06/12/13	06/12/13 12:55 PM	1306077-005A	06/03/13 12:05 PM	06/12/13	06/12/13 2:02 PM
1306077-005A	06/03/13 12:05 PM	06/12/13	06/12/13 2:56 PM	1306077-006A	06/03/13 12:56 PM	06/11/13	06/11/13 4:46 PM
1306077-006A	06/03/13 12:56 PM	06/11/13	06/11/13 4:56 PM	1306077-006A	06/03/13 12:56 PM	06/12/13	06/12/13 12:44 PM
1306077-007A	06/03/13 1:41 PM	06/12/13	06/12/13 1:16 PM	1306077-007A	06/03/13 1:41 PM	06/12/13	06/12/13 1:16 PM
1306077-008A	06/03/13 2:19 PM	06/11/13	06/11/13 11:34 AM	1306077-008A	06/03/13 2:19 PM	06/11/13	06/11/13 2:01 PM
1306077-008A	06/03/13 2:19 PM	06/12/13	06/12/13 11:22 AM	1306077-009A	06/03/13 3:04 PM	06/11/13	06/11/13 11:45 AM
1306077-009A	06/03/13 3:04 PM	06/12/13	06/12/13 10:22 AM	1306077-010A	06/03/13 4:09 PM	06/11/13	06/11/13 12:06 PM
1306077-010A	06/03/13 4:09 PM	06/12/13	06/12/13 10:32 AM	1306077-011A	06/03/13 5:02 PM	06/11/13	06/11/13 12:27 PM
1306077-011A	06/03/13 5:02 PM	06/11/13	06/11/13 12:37 PM	1306077-011A	06/03/13 5:02 PM	06/11/13	06/11/13 2:22 PM
1306077-012A	06/03/13 5:32 PM	06/11/13	06/11/13 12:48 PM	1306077-012A	06/03/13 5:32 PM	06/12/13	06/12/13 11:32 AM
1306077-013A	06/03/13 6:04 PM	06/11/13	06/11/13 1:09 PM	1306077-013A	06/03/13 6:04 PM	06/12/13	06/12/13 11:53 AM
1306077-014A	06/03/13	06/11/13	06/11/13 1:30 PM	1306077-014A	06/03/13	06/12/13	06/12/13 12:14 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soilgas | QC Matrix: Soilgas | BatchID: 78219 | WorkOrder: 1306077

EPA Method: TO15 | **Extraction: TO15** | **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Acrylonitrile	N/A	25	N/A	N/A	N/A	98.2	N/A	N/A	60 - 140
tert-Amyl methyl ether (TAME)	N/A	25	N/A	N/A	N/A	112	N/A	N/A	60 - 140
Benzene	N/A	25	N/A	N/A	N/A	87.1	N/A	N/A	60 - 140
Benzyl chloride	N/A	25	N/A	N/A	N/A	103	N/A	N/A	60 - 140
Bromodichloromethane	N/A	25	N/A	N/A	N/A	94.3	N/A	N/A	60 - 140
Bromoform	N/A	25	N/A	N/A	N/A	116	N/A	N/A	60 - 140
t-Butyl alcohol (TBA)	N/A	25	N/A	N/A	N/A	129	N/A	N/A	60 - 140
Carbon Disulfide	N/A	25	N/A	N/A	N/A	95.1	N/A	N/A	60 - 140
Carbon Tetrachloride	N/A	25	N/A	N/A	N/A	107	N/A	N/A	60 - 140
Chlorobenzene	N/A	25	N/A	N/A	N/A	92.3	N/A	N/A	60 - 140
Chloroethane	N/A	25	N/A	N/A	N/A	92.2	N/A	N/A	60 - 140
Chloroform	N/A	25	N/A	N/A	N/A	94.3	N/A	N/A	60 - 140
Chloromethane	N/A	25	N/A	N/A	N/A	85.2	N/A	N/A	60 - 140
Dibromochloromethane	N/A	25	N/A	N/A	N/A	103	N/A	N/A	60 - 140
1,2-Dibromo-3-chloropropane	N/A	25	N/A	N/A	N/A	95.4	N/A	N/A	60 - 140
1,2-Dibromoethane (EDB)	N/A	25	N/A	N/A	N/A	90.9	N/A	N/A	60 - 140
1,2-Dichlorobenzene	N/A	25	N/A	N/A	N/A	89.8	N/A	N/A	60 - 140
1,3-Dichlorobenzene	N/A	25	N/A	N/A	N/A	89.6	N/A	N/A	60 - 140
1,4-Dichlorobenzene	N/A	25	N/A	N/A	N/A	89	N/A	N/A	60 - 140
Dichlorodifluoromethane	N/A	25	N/A	N/A	N/A	93.1	N/A	N/A	60 - 140
1,1-Dichloroethane	N/A	25	N/A	N/A	N/A	101	N/A	N/A	60 - 140
1,2-Dichloroethane (1,2-DCA)	N/A	25	N/A	N/A	N/A	99.4	N/A	N/A	60 - 140
1,1-Dichloroethene	N/A	25	N/A	N/A	N/A	87.7	N/A	N/A	60 - 140
cis-1,2-Dichloroethene	N/A	25	N/A	N/A	N/A	102	N/A	N/A	60 - 140
trans-1,2-Dichloroethene	N/A	25	N/A	N/A	N/A	102	N/A	N/A	60 - 140
1,2-Dichloropropane	N/A	25	N/A	N/A	N/A	88.4	N/A	N/A	60 - 140
cis-1,3-Dichloropropene	N/A	25	N/A	N/A	N/A	103	N/A	N/A	60 - 140
trans-1,3-Dichloropropene	N/A	25	N/A	N/A	N/A	116	N/A	N/A	60 - 140
1,2-Dichloro-1,1,2,2-tetrafluoroethane	N/A	25	N/A	N/A	N/A	92.4	N/A	N/A	60 - 140
Diisopropyl ether (DIPE)	N/A	25	N/A	N/A	N/A	95.5	N/A	N/A	60 - 140
1,4-Dioxane	N/A	25	N/A	N/A	N/A	84.1	N/A	N/A	60 - 140

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soilgas | QC Matrix: Soilgas | BatchID: 78219 | WorkOrder: 1306077

EPA Method: TO15 | **Extraction: TO15** | **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Ethyl acetate	N/A	25	N/A	N/A	N/A	97.4	N/A	N/A	60 - 140
Ethyl tert-butyl ether (ETBE)	N/A	25	N/A	N/A	N/A	132	N/A	N/A	60 - 140
Ethylbenzene	N/A	25	N/A	N/A	N/A	90.4	N/A	N/A	60 - 140
Freon 113	N/A	25	N/A	N/A	N/A	99.4	N/A	N/A	60 - 140
Hexachlorobutadiene	N/A	25	N/A	N/A	N/A	80.1	N/A	N/A	60 - 140
4-Methyl-2-pentanone (MIBK)	N/A	25	N/A	N/A	N/A	83.6	N/A	N/A	60 - 140
Methyl-t-butyl ether (MTBE)	N/A	25	N/A	N/A	N/A	118	N/A	N/A	60 - 140
Methylene chloride	N/A	25	N/A	N/A	N/A	91.6	N/A	N/A	60 - 140
Naphthalene	N/A	50	N/A	N/A	N/A	90.3	N/A	N/A	60 - 140
Styrene	N/A	25	N/A	N/A	N/A	95.4	N/A	N/A	60 - 140
1,1,1,2-Tetrachloroethane	N/A	25	N/A	N/A	N/A	92.1	N/A	N/A	60 - 140
1,1,2,2-Tetrachloroethane	N/A	25	N/A	N/A	N/A	88.9	N/A	N/A	60 - 140
Tetrachloroethene	N/A	25	N/A	N/A	N/A	93	N/A	N/A	60 - 140
Tetrahydrofuran	N/A	25	N/A	N/A	N/A	89.3	N/A	N/A	60 - 140
Toluene	N/A	25	N/A	N/A	N/A	90.6	N/A	N/A	60 - 140
1,2,4-Trichlorobenzene	N/A	25	N/A	N/A	N/A	84.1	N/A	N/A	60 - 140
1,1,1-Trichloroethane	N/A	25	N/A	N/A	N/A	111	N/A	N/A	60 - 140
1,1,2-Trichloroethane	N/A	25	N/A	N/A	N/A	92.8	N/A	N/A	60 - 140
Trichloroethene	N/A	25	N/A	N/A	N/A	93.4	N/A	N/A	60 - 140
1,2,4-Trimethylbenzene	N/A	25	N/A	N/A	N/A	90.3	N/A	N/A	60 - 140
1,3,5-Trimethylbenzene	N/A	25	N/A	N/A	N/A	90	N/A	N/A	60 - 140
Vinyl Chloride	N/A	25	N/A	N/A	N/A	77.1	N/A	N/A	60 - 140
Xylenes, Total	N/A	75	N/A	N/A	N/A	89.8	N/A	N/A	60 - 140
%SS1:	N/A	500	N/A	N/A	N/A	124	N/A	N/A	60 - 140
%SS2:	N/A	500	N/A	N/A	N/A	111	N/A	N/A	60 - 140
%SS3:	N/A	500	N/A	N/A	N/A	106	N/A	N/A	60 - 140

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soilgas | QC Matrix: Soilgas | BatchID: 78219 | WorkOrder: 1306077

EPA Method: TO15 | **Extraction: TO15** | **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS

BATCH 78219 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1306077-001A	06/03/13 8:47 AM	06/07/13	06/07/13 3:24 PM	1306077-002A	06/03/13 10:06 AM	06/07/13	06/07/13 4:08 PM
1306077-003A	06/03/13 10:06 AM	06/07/13	06/07/13 4:50 PM	1306077-004A	06/03/13 11:09 AM	06/07/13	06/07/13 5:32 PM
1306077-005A	06/03/13 12:05 PM	06/07/13	06/07/13 6:13 PM	1306077-006A	06/03/13 12:56 PM	06/07/13	06/07/13 6:58 PM
1306077-007A	06/03/13 1:41 PM	06/12/13	06/12/13 10:02 AM	1306077-008A	06/03/13 2:19 PM	06/07/13	06/07/13 8:22 PM
1306077-009A	06/03/13 3:04 PM	06/11/13	06/11/13 4:57 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soilgas | QC Matrix: Soilgas | BatchID: 78223 | WorkOrder: 1306077

EPA Method: TO15 | **Extraction: TO15** | **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Acrylonitrile	N/A	25	N/A	N/A	N/A	112	N/A	N/A	60 - 140
tert-Amyl methyl ether (TAME)	N/A	25	N/A	N/A	N/A	117	N/A	N/A	60 - 140
Benzene	N/A	25	N/A	N/A	N/A	93.7	N/A	N/A	60 - 140
Benzyl chloride	N/A	25	N/A	N/A	N/A	122	N/A	N/A	60 - 140
Bromodichloromethane	N/A	25	N/A	N/A	N/A	104	N/A	N/A	60 - 140
Bromoform	N/A	25	N/A	N/A	N/A	94.7	N/A	N/A	60 - 140
t-Butyl alcohol (TBA)	N/A	25	N/A	N/A	N/A	105	N/A	N/A	60 - 140
Carbon Disulfide	N/A	25	N/A	N/A	N/A	106	N/A	N/A	60 - 140
Carbon Tetrachloride	N/A	25	N/A	N/A	N/A	104	N/A	N/A	60 - 140
Chlorobenzene	N/A	25	N/A	N/A	N/A	96.5	N/A	N/A	60 - 140
Chloroethane	N/A	25	N/A	N/A	N/A	107	N/A	N/A	60 - 140
Chloroform	N/A	25	N/A	N/A	N/A	102	N/A	N/A	60 - 140
Chloromethane	N/A	25	N/A	N/A	N/A	102	N/A	N/A	60 - 140
Dibromochloromethane	N/A	25	N/A	N/A	N/A	102	N/A	N/A	60 - 140
1,2-Dibromo-3-chloropropane	N/A	25	N/A	N/A	N/A	114	N/A	N/A	60 - 140
1,2-Dibromoethane (EDB)	N/A	25	N/A	N/A	N/A	95	N/A	N/A	60 - 140
1,2-Dichlorobenzene	N/A	25	N/A	N/A	N/A	85.3	N/A	N/A	60 - 140
1,3-Dichlorobenzene	N/A	25	N/A	N/A	N/A	89.2	N/A	N/A	60 - 140
1,4-Dichlorobenzene	N/A	25	N/A	N/A	N/A	83.2	N/A	N/A	60 - 140
Dichlorodifluoromethane	N/A	25	N/A	N/A	N/A	99.3	N/A	N/A	60 - 140
1,1-Dichloroethane	N/A	25	N/A	N/A	N/A	99.2	N/A	N/A	60 - 140
1,2-Dichloroethane (1,2-DCA)	N/A	25	N/A	N/A	N/A	107	N/A	N/A	60 - 140
1,1-Dichloroethene	N/A	25	N/A	N/A	N/A	118	N/A	N/A	60 - 140
cis-1,2-Dichloroethene	N/A	25	N/A	N/A	N/A	102	N/A	N/A	60 - 140
trans-1,2-Dichloroethene	N/A	25	N/A	N/A	N/A	103	N/A	N/A	60 - 140
1,2-Dichloropropane	N/A	25	N/A	N/A	N/A	100	N/A	N/A	60 - 140
cis-1,3-Dichloropropene	N/A	25	N/A	N/A	N/A	110	N/A	N/A	60 - 140
trans-1,3-Dichloropropene	N/A	25	N/A	N/A	N/A	117	N/A	N/A	60 - 140
1,2-Dichloro-1,1,2,2-tetrafluoroethane	N/A	25	N/A	N/A	N/A	97.7	N/A	N/A	60 - 140
Diisopropyl ether (DIPE)	N/A	25	N/A	N/A	N/A	105	N/A	N/A	60 - 140
1,4-Dioxane	N/A	25	N/A	N/A	N/A	100	N/A	N/A	60 - 140

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soilgas | QC Matrix: Soilgas | BatchID: 78223 | WorkOrder: 1306077

EPA Method: TO15 | **Extraction: TO15** | **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Ethyl acetate	N/A	25	N/A	N/A	N/A	107	N/A	N/A	60 - 140
Ethyl tert-butyl ether (ETBE)	N/A	25	N/A	N/A	N/A	112	N/A	N/A	60 - 140
Ethylbenzene	N/A	25	N/A	N/A	N/A	98.7	N/A	N/A	60 - 140
Freon 113	N/A	25	N/A	N/A	N/A	99.4	N/A	N/A	60 - 140
Hexachlorobutadiene	N/A	25	N/A	N/A	N/A	88.3	N/A	N/A	60 - 140
4-Methyl-2-pentanone (MIBK)	N/A	25	N/A	N/A	N/A	107	N/A	N/A	60 - 140
Methyl-t-butyl ether (MTBE)	N/A	25	N/A	N/A	N/A	105	N/A	N/A	60 - 140
Methylene chloride	N/A	25	N/A	N/A	N/A	96.1	N/A	N/A	60 - 140
Naphthalene	N/A	50	N/A	N/A	N/A	94	N/A	N/A	60 - 140
Styrene	N/A	25	N/A	N/A	N/A	98.4	N/A	N/A	60 - 140
1,1,1,2-Tetrachloroethane	N/A	25	N/A	N/A	N/A	104	N/A	N/A	60 - 140
1,1,2,2-Tetrachloroethane	N/A	25	N/A	N/A	N/A	91.3	N/A	N/A	60 - 140
Tetrachloroethene	N/A	25	N/A	N/A	N/A	88.9	N/A	N/A	60 - 140
Tetrahydrofuran	N/A	25	N/A	N/A	N/A	121	N/A	N/A	60 - 140
Toluene	N/A	25	N/A	N/A	N/A	107	N/A	N/A	60 - 140
1,2,4-Trichlorobenzene	N/A	25	N/A	N/A	N/A	86	N/A	N/A	60 - 140
1,1,1-Trichloroethane	N/A	25	N/A	N/A	N/A	102	N/A	N/A	60 - 140
1,1,2-Trichloroethane	N/A	25	N/A	N/A	N/A	95.8	N/A	N/A	60 - 140
Trichloroethene	N/A	25	N/A	N/A	N/A	97.3	N/A	N/A	60 - 140
1,2,4-Trimethylbenzene	N/A	25	N/A	N/A	N/A	96.2	N/A	N/A	60 - 140
1,3,5-Trimethylbenzene	N/A	25	N/A	N/A	N/A	96.5	N/A	N/A	60 - 140
Vinyl Chloride	N/A	25	N/A	N/A	N/A	104	N/A	N/A	60 - 140
Xylenes, Total	N/A	75	N/A	N/A	N/A	93.6	N/A	N/A	60 - 140
%SS1:	N/A	500	N/A	N/A	N/A	103	N/A	N/A	60 - 140
%SS2:	N/A	500	N/A	N/A	N/A	97	N/A	N/A	60 - 140
%SS3:	N/A	500	N/A	N/A	N/A	100	N/A	N/A	60 - 140

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644


QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soilgas | QC Matrix: Soilgas | BatchID: 78223 | WorkOrder: 1306077

EPA Method: TO15 | **Extraction: TO15** | **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS

BATCH 78223 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1306077-010A	06/03/13 4:09 PM	06/11/13	06/11/13 5:37 PM	1306077-011A	06/03/13 5:02 PM	06/07/13	06/07/13 9:43 PM
1306077-012A	06/03/13 5:32 PM	06/07/13	06/07/13 10:24 PM	1306077-013A	06/03/13 6:04 PM	06/07/13	06/07/13 11:05 PM
1306077-014A	06/03/13	06/07/13	06/07/13 11:46 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Reported: 06/11/13
Walnut Creek, CA 94596	Client P.O.:	Date Completed: 06/10/13

WorkOrder: 1306078

June 11, 2013

Dear Pawan:

Enclosed within are:

1) The results of the **1** analyzed sample from your project: **Sherwin Williams,**
2) QC data for the above sample, and
3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

1306078

McCAMPBELL ANALYTICAL INC.
1534 WILLOW PASS ROAD / PITTSBURG, CA 94565-1701
Website: www.mccampbell.com / Email: main@mccampbell.com
Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY Standard

EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Pawan Sharma	Bill To: Pawan Sharma
Company: CDM Smith	
	E-Mail: sharmapk@cdmsmith.com
Tele: (925) 933-2900	Fax: ( )
Project #:	Project Name: Sherwin Williams
Project Location: Emeryville, CA	
Sampler Signature:	

Lab Use Only

Pressurized By	Date	Pressurization Gas N2	Pressurization Gas He

Helium Shroud SN#: Subcontractor shroud used

Other:

Notes: ASTM D-1946 → special report for carbon dioxide, methane, and oxygen

Field Sample ID (Location)	Collection Date	Collection Time	Canister SN#	Manifold / Sampler Kit SN#	Analysis Requested	~~Indoor~~ Ambient Air	Soil Gas	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
Ambient - ~~Indoor~~ 20130603	6/3/13	0730	CAN4755-625	—	TO-15, ASTM D-1946	✓		-28	0		

Relinquished By:	Date:	Time:	Received By:
	6/3/13	1448	
	6/3	1703	
Relinquished By:	Date:	Time:	Received By:
	6/4/13	1645	
Relinquished By:	Date:	Time:	Received By:

Temp (°C): N/a Work Order #: 1306078

Equipment Condition: good

Shipped Via: courier

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1306078 **ClientCode: CDM**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Pawan Sharma
CDM Smith
100 Pringle Avenue Ste. 300
Walnut Creek, CA 94596
(925) 933- 2900 FAX: (925) 933-4174

Email: sharmapk@cdm.com
cc:
PO:
ProjectNo: Sherwin Williams

Bill to:
Michael Zafer
CDM Smith
100 Pringle Avenue Ste. 300
Walnut Creek, CA 94596
SEND HARCOPY

Requested TAT: 5 days

Date Received: **06/04/2013**
Date Printed: **06/11/2013**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1306078-001	Ambient-20130603	Indoor Air	6/3/2013 7:30	☐	A	A	A	A								

Test Legend:

1	LG_SUMMA_INDOOR	2	PRHEO2METER	3	PRHERegulator	4	TO15_INDOOR(UG/M3)	5	
6		7		8		9		10	
11		12							

Prepared by: Rosa Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name: **CDM Smith**

Date and Time Received: **6/4/2013 4:45:00 PM**

Project Name: **Sherwin Williams**

LogIn Reviewed by: Rosa Venegas

WorkOrder N°: **1306078** Matrix: Indoor Air

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp:		NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☐	No ☑	

** NOTE: If the "No" box is checked, see comments below.*

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith 100 Pringle Avenue Ste. 300 Walnut Creek, CA 94596	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
	Client Contact: Pawan Sharma	Date Reported: 06/11/13
	Client P.O.:	Date Completed: 06/10/13

Work Order: 1306078

June 11, 2013

CASE NARRATIVE REGARDING TO-15 ANALYSIS

All summa canisters are EVACUATED 5 days after the reporting of the results. Please call or email if a longer retention time is required.

In an effort to attain the lowest reporting limits possible for the majority of the TO-15 target list, high level compounds may be analyzed using EPA Method 8260B.

Polymer (Tedlar) bags are not recommended for TO15 samples. The disadvantages are listed in Appendix B of the DTSC Advisory of April 2012.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/07/13-06/11/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/07/13-06/11/13

Light Gases*

Extraction Method: ASTM D 1946-90 | Analytical Method: ASTM D 1946-90 | Work Order: 1306078

Lab ID	1306078-001A				Reporting Limit for DF =1	
Client ID	Ambient-20130603					
Matrix	Indoor Air					
Initial Pressure (psia)	12.50					
Final Pressure (psia)	17.00					
DF	1				Indoor Air	W
Compound	**Concentration**				µL/L	ug/L
Carbon Dioxide	370				50	NA
Methane	1.6				1.0	NA
Oxygen	180,000				4000	NA
Surrogate Recoveries (%)						
%SS:	N/A					
Comments						

* soil vapor samples are reported in µL/L.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

DHS ELAP Certification 1644

BB Analyst's Initial

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

CDM Smith	Client Project ID: Sherwin Williams	Date Sampled: 06/03/13
		Date Received: 06/04/13
100 Pringle Avenue Ste. 300	Client Contact: Pawan Sharma	Date Extracted: 06/06/13
Walnut Creek, CA 94596	Client P.O.:	Date Analyzed: 06/06/13

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 1306078

Lab ID	1306078-001A	Initial Pressure (psia)	14.71
Client ID	Ambient-20130603	Final Pressure (psia)	14.71
Matrix	Indoor Air		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	34	1.0	12	Acrylonitrile	ND	1.0	0.22
tert-Amyl methyl ether (TAME)	ND	1.0	0.42	Benzene	ND	1.0	0.32
Benzyl chloride	ND	1.0	0.53	Bromodichloromethane	ND	1.0	0.7
Bromoform	ND	1.0	1.1	Bromomethane	0.54	1.0	0.39
1,3-Butadiene	ND	1.0	0.22	2-Butanone (MEK)	ND	1.0	30
t-Butyl alcohol (TBA)	ND	1.0	6.2	Carbon Disulfide	ND	1.0	0.32
Carbon Tetrachloride	ND	1.0	0.64	Chlorobenzene	ND	1.0	0.47
Chloroethane	ND	1.0	0.27	Chloroform	ND	1.0	0.49
Chloromethane	0.70	1.0	0.21	Cyclohexane	ND	1.0	35
Dibromochloromethane	ND	1.0	0.87	1,2-Dibromo-3-chloropropane	ND	1.0	0.98
1,2-Dibromoethane (EDB)	ND	1.0	0.78	1,2-Dichlorobenzene	ND	1.0	0.61
1,3-Dichlorobenzene	ND	1.0	0.61	1,4-Dichlorobenzene	ND	1.0	0.61
Dichlorodifluoromethane	2.4	1.0	0.5	1,1-Dichloroethane	ND	1.0	0.41
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.41	1,1-Dichloroethene	ND	1.0	0.4
cis-1,2-Dichloroethene	ND	1.0	0.4	trans-1,2-Dichloroethene	ND	1.0	0.4
1,2-Dichloropropane	ND	1.0	0.47	cis-1,3-Dichloropropene	ND	1.0	0.46
trans-1,3-Dichloropropene	ND	1.0	0.46	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.0	0.71
Diisopropyl ether (DIPE)	ND	1.0	0.42	1,4-Dioxane	ND	1.0	0.37
Ethyl acetate	9.1	1.0	0.92	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.42
Ethylbenzene	ND	1.0	0.44	4-Ethyltoluene	ND	1.0	0.5
Freon 113	ND	1.0	0.78	Heptane	ND	1.0	42
Hexachlorobutadiene	ND	1.0	1.1	Hexane	ND	1.0	36
2-Hexanone	ND	1.0	42	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.42
Methyl-t-butyl ether (MTBE)	ND	1.0	0.37	Methylene chloride	0.63	1.0	0.35
4-Phenylcyclohexene	ND	1.0	6.6	Naphthalene	ND	1.0	5.3
Propene	ND	1.0	18	Styrene	ND	1.0	0.43
1,1,1,2-Tetrachloroethane	ND	1.0	0.7	1,1,2,2-Tetrachloroethane	ND	1.0	0.7
Tetrachloroethene	ND	1.0	0.69	Tetrahydrofuran	ND	1.0	0.6
Toluene	0.53	1.0	0.38	1,2,4-Trichlorobenzene	ND	1.0	0.75
1,1,1-Trichloroethane	ND	1.0	0.55	1,1,2-Trichloroethane	ND	1.0	0.55
Trichloroethene	ND	1.0	0.55	Trichlorofluoromethane	1.2	1.0	0.57
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Acetate	ND	1.0	36	Vinyl Chloride	ND	1.0	0.26
Xylenes, Total	ND	1.0	1.3				

Surrogate Recoveries (%)

%SS1:	102	%SS2:	97
%SS3:	100		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR ASTM D 1946-90

W.O. Sample Matrix: Indoor Air | QC Matrix: SoilGas | BatchID: 78170 | WorkOrder: 1306078

EPA Method: ASTM D 1946-90 **Extraction: ASTM D 1946-90** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µL/L	µL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Methane	N/A	100	N/A	N/A	N/A	96.8	N/A	N/A	70 - 130
Nitrogen	N/A	26000	N/A	N/A	N/A	91.1	N/A	N/A	70 - 130
Oxygen	N/A	7000	N/A	N/A	N/A	87.4	N/A	N/A	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 78170 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1306078-001A	06/03/13 7:30 AM	06/07/13	06/07/13 5:58 PM	1306078-001A	06/03/13 7:30 AM	06/11/13	06/11/13 1:51 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Indoor Air | QC Matrix: Soilgas | BatchID: 78105 | WorkOrder: 1306078

EPA Method: TO15 | **Extraction: TO15** | **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Acrylonitrile	N/A	25	N/A	N/A	N/A	70.7	N/A	N/A	60 - 140
tert-Amyl methyl ether (TAME)	N/A	25	N/A	N/A	N/A	111	N/A	N/A	60 - 140
Benzene	N/A	25	N/A	N/A	N/A	89.5	N/A	N/A	60 - 140
Benzyl chloride	N/A	25	N/A	N/A	N/A	118	N/A	N/A	60 - 140
Bromodichloromethane	N/A	25	N/A	N/A	N/A	100	N/A	N/A	60 - 140
Bromoform	N/A	25	N/A	N/A	N/A	91.9	N/A	N/A	60 - 140
Carbon Disulfide	N/A	25	N/A	N/A	N/A	90.2	N/A	N/A	60 - 140
Carbon Tetrachloride	N/A	25	N/A	N/A	N/A	99.5	N/A	N/A	60 - 140
Chlorobenzene	N/A	25	N/A	N/A	N/A	92.5	N/A	N/A	60 - 140
Chloroethane	N/A	25	N/A	N/A	N/A	108	N/A	N/A	60 - 140
Chloroform	N/A	25	N/A	N/A	N/A	98.3	N/A	N/A	60 - 140
Chloromethane	N/A	25	N/A	N/A	N/A	89.2	N/A	N/A	60 - 140
Dibromochloromethane	N/A	25	N/A	N/A	N/A	98.5	N/A	N/A	60 - 140
1,2-Dibromo-3-chloropropane	N/A	25	N/A	N/A	N/A	110	N/A	N/A	60 - 140
1,2-Dibromoethane (EDB)	N/A	25	N/A	N/A	N/A	91.4	N/A	N/A	60 - 140
1,3-Dichlorobenzene	N/A	25	N/A	N/A	N/A	86.2	N/A	N/A	60 - 140
1,4-Dichlorobenzene	N/A	25	N/A	N/A	N/A	80.1	N/A	N/A	60 - 140
Dichlorodifluoromethane	N/A	25	N/A	N/A	N/A	96.6	N/A	N/A	60 - 140
1,1-Dichloroethane	N/A	25	N/A	N/A	N/A	96.2	N/A	N/A	60 - 140
1,2-Dichloroethane (1,2-DCA)	N/A	25	N/A	N/A	N/A	102	N/A	N/A	60 - 140
cis-1,2-Dichloroethene	N/A	25	N/A	N/A	N/A	98.5	N/A	N/A	60 - 140
trans-1,2-Dichloroethene	N/A	25	N/A	N/A	N/A	101	N/A	N/A	60 - 140
1,2-Dichloropropane	N/A	25	N/A	N/A	N/A	97.6	N/A	N/A	60 - 140
cis-1,3-Dichloropropene	N/A	25	N/A	N/A	N/A	107	N/A	N/A	60 - 140
trans-1,3-Dichloropropene	N/A	25	N/A	N/A	N/A	113	N/A	N/A	60 - 140
1,2-Dichloro-1,1,2,2-tetrafluoroethane	N/A	25	N/A	N/A	N/A	101	N/A	N/A	60 - 140
Diisopropyl ether (DIPE)	N/A	25	N/A	N/A	N/A	103	N/A	N/A	60 - 140
1,4-Dioxane	N/A	25	N/A	N/A	N/A	96.5	N/A	N/A	60 - 140
Ethyl acetate	N/A	25	N/A	N/A	N/A	105	N/A	N/A	60 - 140
Ethyl tert-butyl ether (ETBE)	N/A	25	N/A	N/A	N/A	108	N/A	N/A	60 - 140
Ethylbenzene	N/A	25	N/A	N/A	N/A	94.7	N/A	N/A	60 - 140

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Indoor Air | QC Matrix: Soilgas | BatchID: 78105 | WorkOrder: 1306078

EPA Method: TO15 | **Extraction: TO15** | **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Freon 113	N/A	25	N/A	N/A	N/A	68.8	N/A	N/A	60 - 140
Hexachlorobutadiene	N/A	25	N/A	N/A	N/A	85.3	N/A	N/A	60 - 140
4-Methyl-2-pentanone (MIBK)	N/A	25	N/A	N/A	N/A	104	N/A	N/A	60 - 140
Methyl-t-butyl ether (MTBE)	N/A	25	N/A	N/A	N/A	102	N/A	N/A	60 - 140
Methylene chloride	N/A	25	N/A	N/A	N/A	65.3	N/A	N/A	60 - 140
Naphthalene	N/A	50	N/A	N/A	N/A	90.2	N/A	N/A	60 - 140
Styrene	N/A	25	N/A	N/A	N/A	95.1	N/A	N/A	60 - 140
1,1,1,2-Tetrachloroethane	N/A	25	N/A	N/A	N/A	101	N/A	N/A	60 - 140
1,1,2,2-Tetrachloroethane	N/A	25	N/A	N/A	N/A	87.7	N/A	N/A	60 - 140
Tetrachloroethene	N/A	25	N/A	N/A	N/A	85.8	N/A	N/A	60 - 140
Tetrahydrofuran	N/A	25	N/A	N/A	N/A	115	N/A	N/A	60 - 140
Toluene	N/A	25	N/A	N/A	N/A	103	N/A	N/A	60 - 140
1,2,4-Trichlorobenzene	N/A	25	N/A	N/A	N/A	83.3	N/A	N/A	60 - 140
1,1,1-Trichloroethane	N/A	25	N/A	N/A	N/A	98	N/A	N/A	60 - 140
1,1,2-Trichloroethane	N/A	25	N/A	N/A	N/A	91.9	N/A	N/A	60 - 140
Trichloroethene	N/A	25	N/A	N/A	N/A	93.5	N/A	N/A	60 - 140
1,2,4-Trimethylbenzene	N/A	25	N/A	N/A	N/A	92	N/A	N/A	60 - 140
1,3,5-Trimethylbenzene	N/A	25	N/A	N/A	N/A	93.5	N/A	N/A	60 - 140
Vinyl Chloride	N/A	25	N/A	N/A	N/A	112	N/A	N/A	60 - 140
Xylenes, Total	N/A	75	N/A	N/A	N/A	89.8	N/A	N/A	60 - 140
%SS1:	N/A	500	N/A	N/A	N/A	103	N/A	N/A	60 - 140
%SS2:	N/A	500	N/A	N/A	N/A	95	N/A	N/A	60 - 140
%SS3:	N/A	500	N/A	N/A	N/A	98	N/A	N/A	60 - 140

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 78105 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1306078-001A	06/03/13 7:30 AM	06/06/13	06/06/13 9:10 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

CDM Smith

cdmsmith.com

REPORT

Remedy Implementation Completion Report

The Sherwin-Williams Company
1450 Sherwin Avenue
Emeryville, California

Prepared For:

The Sherwin-Williams Company
101 Prospect Avenue NW
Cleveland, OH 44115

Prepared By:

CDM Smith Inc.
100 Pringle Avenue, Suite 300
Walnut Creek, California 94596

July 25, 2012

CDM Smith

Remedy Implementation Completion Report

The Sherwin-Williams Company
1450 Sherwin Avenue
Emeryville, California

July 25, 2012

Prepared For:

The Sherwin-Williams Company
101 Prospect Avenue NW
Cleveland, OH 44115-1075

CERTIFICATION:

This document was prepared under the direction and supervision of qualified, registered professionals.



David K. Cline, P.E.
CDM Smith Inc.



Pawan K. Sharma, P.E.
CDM Smith Inc.

Envirocon

July 25, 2012

Mr. Larry Mencin
Sherwin-Williams
1450 Sherwin Ave.,
Emeryville, CA 94608

RE: Certification Letter for the Remedy Implementation Completion Report
The Sherwin-Williams Company: 1450 Sherwin Avenue,
Emeryville, California

Dear Mr. Mencin:

The intent of this letter is to summarize the design components and remedial activities performed by Envirocon in executing our contract for The Sherwin-Williams Company (S-W) property located at 1450 Sherwin Avenue in Emeryville, California and in doing so, certify that these activities were performed in accordance with the Remedial Design and Implementation Plan.

- Design Assistance with formalizing the Final Remedial Design Implementation Report (RDIP), dated June 29, 2011, included:

    - Heave Management Plan and Earthwork Requirements, prepared by TRC Solutions, dated January 24, 2011: *Geotechnical Recommendations, Remedial Design and Implementation Plan (RDIP), Former Sherwin-Williams Coating Facility, Emeryville, California*;

    - Temporary Shoring Design along Horton Street and Building 31 to support excavation to depths of -11 FT NAVD88, prepared by Condon Johnson, dated February 10, 2011: *Temporary Shoring Plans;*

    - Dust and Vapor Control Plan to mitigate public concerns at the Site perimeter, prepared by KUMA Corporation, dated May 2011: *Dust and Vapor Control Plan V1.6;*

    - Noise and Vibration Monitoring and Mitigation Plan to compare background levels to high energy construction equipment; prepared by Eilar Associates, Inc., dated January 20, 2011, *Noise and Vibration Monitoring Plan*;

- Stability Analysis to support the excavation(s) of each: Slurry Wall Extension, Slurry Wall Breaches, and the Interceptor Trench, prepared by Envirocon, dated October 25, 2011: *Trench Stability Calculation for SWE* (Submittal No. 004.c.1), November 7, 2011: *Trench Stability Calculations for Slurry Wall Breaches* (Submittal No. 011.b), and November 23, 2011: *Interceptor Trench Stability Calculations* (submittal No. 014.f);

- Excavation Design Plan developed to incorporate boring logs from historical and recent data into a 3-dimensional excavation plan that could be utilized to segregate the excavation into 8 separate categories; prepared by Envirocon, dated March 19, 2011: *Excavation Design Plan*(s).

- Pre-mobilization activities including submittal of workplans and acquiring construction related permits;

- Installation and operation of a temporary soil vapor extraction and treatment system to remove volatile organics from excavation area vadose zone soils;

- Relocation of high-pressure natural gas line from adjacent to the excavation, under the western sidewalk along Horton Street, to the other side of the street;

- Removal and offsite disposal of aboveground and underground structures, pipes, and debris containing arsenic, lead, and/or organic contaminants, primarily consisting of the raised cap and former water treatment plant;

- Excavation and offsite disposal of vadose zone soil containing arsenic, lead, and/or organic contaminants to support future potential residential use of the Site;

- Excavation and offsite disposal of saturated zone soil containing arsenic, lead, and/or organic contaminants to support long-term protection of groundwater underlying the Site;

- Excavation dewatering, onsite treatment, and discharge to sanitary sewer;

- Backfill of excavation areas to control groundwater movement within the Site;

- Placement of backfill and gravel cover to re-grade the Site to facilitate storm water drainage;

- Extension of the existing slurry wall along the southwestern portion of the Site;

Envirocon

- Installation of a membrane barrier and interceptor trench to prevent movement of groundwater from the S-W property to the Novartis property;

- Removal of portions of the existing slurry wall to facilitate groundwater movement from the Site to offsite, downgradient (western) areas;

- Abandonment of a former underground storage tank (UST) at the Site.

The remedial activities listed above including those items specifically identified to support the design assistance were, to the best of my knowledge and belief, performed in general accordance with the Final Remedial Design and Implementation Plan (RDIP) and its associated documents including Department of Toxic Substances Control (DTSC) approved variances, as described and documented in the Remedy Implementation Completion Report prepared by CDM Smith, dated July 25, 2012.

Further, my review of the project data and quality control procedures and my assessment of the persons directly responsible for gathering QA/QC information pertaining to construction of the remedy elements associated with the RDIP indicate that these activities were, to the best of my knowledge and belief, conducted in general accordance with applicable industry standards and the Site specific Quality Control/Quality Assurance Project Plan.

Respectfully submitted,





Tino Maestas, P.E.
Senior Engineer
Envirocon, Inc.

Cc Peter Joy, Envirocon Director of Operations
Jeff Rankin, Envirocon Project Director

Table of Contents

Executive Summary **ES-1**

Section 1 Documentation of Results **1-1**

1.1 Locations and Quantities of Excavated Soil 1-1
1.2 Amounts Disposed by Waste Characterization Profile 1-1
1.3 Soil Vapor Extraction and Treatment 1-3
1.4 Air Quality Monitoring Results 1-4
1.5 Vadose Zone Soil Confirmation Sample Results 1-5
1.6 Groundwater Monitoring and Sample Results 1-7
1.7 Underground Storage Tank Abandonment 1-7
1.8 CEQA Mitigation Measures 1-8
1.8.1 Cultural Resources Monitoring Results 1-8
1.8.2 Park Avenue Street Beautification Project 1-8
1.9 Permits and Clearances Obtained 1-10
1.9.1 RDIP Section 2.2, Permitting 1-10
1.9.2 RDIP Section 2.3.2, Community Safety Plan 1-10
1.9.3 RDIP Section 3.4, Clearance and Relocation of Utilities 1-11

Section 2 Variances from RDIP **2-1**

2.1 RDIP Section 3 – Pre-Excavation Activities 2-1
2.1.1 RDIP Section 3.2, Groundwater Monitoring Well Abandonment 2-1
2.1.2 RDIP Section 3.6, Subsurface Vapor Extraction and Treatment 2-1
2.2 RDIP Section 4 – Raised Cap Removal and Shoring 2-1
2.2.1 RDIP Section 4.1, Removal of Raised Cap 2-1
2.2.2 RDIP Section 4.3, Shoring along Horton Street and Building 31 2-1
2.3 RDIP Section 5 – Excavation and Dewatering 2-2
2.3.1 RDIP Section 5.1, Excavation Dewatering 2-2
2.3.2 RDIP Section 5.3, Soil Excavation and Handling 2-3
2.3.3 RDIP Section 5.3.1, Vadose Zone 2-3
2.3.4 RDIP Section 5.3.2, Saturated Zone 2-4
2.3.5 Section 5.5, Waste Stockpiles Management 2-4
2.3.6 RDIP Section 5.6, Vadose Zone Soil Confirmation Sampling 2-4
2.4 RDIP Section 6 – Excavation Backfilling 2-5
2.4.1 RDIP Section 6.4, Backfill Placement, Compaction and Interceptor Trench 2-5
2.4.2 RDIP Section 6.5, Membrane Barrier and Trench Installation, RDIP Section 6.5.1, Selection of Material 2-5
2.4.3 RDIP Section 6.7, Panel Placement 2-5
2.4.4 RDIP Section 6.8, Drain Pipe and Gravel Backfill Placement 2-6
2.5 RDIP Section 7 – Slurry Wall Breach 2-6
2.5.1 RDIP Section 7.3, Slurry Wall Breach 2-6
2.5.2 RDIP Section 7.5, Trench Excavation 2-6
2.5.3 RDIP Section 7.6, Backfill Placement 2-6
2.6 RDIP Section 8 – Slurry Wall Extension 2-6
2.6.1 RDIP Section 8.4, Slurry Wall Extension 2-6
2.7 RDIP Section 9 – Waste Profiling, Transport and Disposal 2-7
2.8 RDIP Section 10 – Non-Remedial Activities 2-8
2.9 RDIP Section 11 – Soil Gas Evaluation 2-8

2.10 RDIP Section 13 – Groundwater Monitoring Program 2-8
2.10.1 RDIP Section 13.1, Groundwater Monitoring Well Locations 2-8
2.10.2 RDIP Section 13.2.1, Groundwater Quality Sampling and Analysis during Remedy Implementation 2-9
2.10.3 RDIP Section 13.2.2, Depth to Groundwater Measurements during Remedy Implementation 2-9

Section 3 Photographs of Site Conditions 3-1

Section 4 References 4-1

Attachments

Attachment A	RDIP Table of Contents
Attachment B	Asbuilt Drawings
Attachment C	Daily, Weekly and Monthly Reports
Attachment D1	Summary of Soil Vapor Extraction and Treatment Influent Monitoring
Attachment D2	Summary Air Monitoring and Sample Results
Attachment D3	Summary of Vadose Zone Soil Confirmation Sample Results
Attachment D4	Summary of Groundwater Monitoring and Sample Results
Attachment D5	Summary of Sample Results from Former UST Excavation
Attachment D6	Summary of Waste Stockpile Sample Results
Attachment E	Archaeological Monitoring Report
Attachment F	Project Permits
Attachment G1	Well Abandonment Reports
Attachment G2	Well Completion Reports and Summary of New Well Construction
Attachment H	EBMUD Reports
Attachment I	Site Photographs
Attachment J1	Non-RCRA Hazardous Waste Manifests (on disc with DTSC submittal only)
Attachment J2	RCRA Hazardous Waste Manifests (on disc with DTSC submittal only)
Attachment K1	PAMP Analytical Reports (on disc with DTSC submittal only)
Attachment K2	Stockpile Analytical Reports (on disc with DTSC submittal only)
Attachment K3	Vadose Zone Soil Confirmation Analytical Reports (on disc with DTSC submittal only)
Attachment K4	Former UST Excavation Analytical Reports (on disc with DTSC submittal only)

Executive Summary

This Remedy Implementation Completion Report (Completion Report) has been prepared for The Sherwin-Williams Company (S-W) property located at 1450 Sherwin Avenue in Emeryville, California and a portion of the adjacent former Rifkin property, located at 4525 – 4563 Horton Street, to which hazardous substances have migrated from the S-W property. Collectively the S-W property and this portion of the former Rifkin property are referred to as the "Site" within this document. The Site consists of approximately 10 acres. Novartis Vaccines and Diagnostics, Inc. (Novartis) is the current owner of the former Rifkin property.

This Completion Report is consistent with the description of report contents presented in Section 14.2.1 of the Remedial Design Implementation Plan (RDIP), dated June 29, 2011 (CDM, 2011), and with the Department of Toxic Substances Control (DTSC) Imminent and Substantial Endangerment Determination and Order and Remedial Action Order No. 05/06-007 (the Order) and the Remedial Action Plan (RAP), dated May 10, 2006 and June 14, 2010, respectively (DTSC, 2006 and CDM, 2010). The RAP and RDIP were approved by DTSC in their letters dated June 14, 2010 and June 30, 2011, respectively (DTSC, 2010 and DTSC, 2011a). DTSC had previously provided conditional approval to proceed with soil excavation after partial review of the RDIP in their letter dated June 8, 2011(DTSC, 2011b). The RAP and RDIP provide summaries of the Site location, background, geology/hydrogeology, and history, and previous project remedial investigation results and actions.

The remedy implementation has achieved the project remedial action objectives (RAOs). The following presents the RAOs that were established for the Site in the RAP and remedy component that fulfills the RAO:

Remedial Action Objective (RAO)	*Remedy Component*
▪ Minimize direct contact/ingestion by humans with Site soil containing chemicals of concern (COCs) at concentrations exceeding the cleanup goals.	▪ Removal of vadose zone soil with COC concentrations above cleanup goals. ▪ Development and recording of the land use covenant (LUC). ▪ Monitor for unknown contamination in areas outside existing removal areas, as identified in the project operation, maintenance and monitoring (OM&M) plan and/or subsequent DTSC-approved modifications. ▪ Monitor soil gas conditions, as identified in the OM&M plan and/or subsequent DTSC-approved modifications.
▪ Minimize migration of and/or inhalation of airborne dust by humans from the Site containing COCs at concentrations exceeding the cleanup goals.	▪ Removal of vadose zone soil with COC concentrations above cleanup goals. ▪ Development and recording of the LUC, controlling intrusive activity at the S-W property.

Remedial Action Objective (RAO)	*Remedy Component*
▪ Minimize exposure to and inhalation by humans of volatile organic COCs at concentrations in indoor air exceeding the cleanup goals.	▪ Removal of vadose zone soil with COC concentrations above cleanup goals. ▪ Development and recording of the LUC. ▪ Monitor for unknown contamination in areas outside existing removal areas, as identified in the OM&M plan and/or subsequent DTSC-approved modifications. ▪ Monitor soil gas conditions, as identified in the OM&M plan and/or subsequent DTSC-approved modifications.
▪ Minimize risk to down-gradient ecological receptors from off-site groundwater migration containing COCs at concentrations exceeding the cleanup goals.	▪ Removal of saturated zone soil with COC concentrations identified as source material. ▪ Backfill to control groundwater movement. ▪ Installation of slurry wall breaches and extension; maintain key portions of existing slurry wall. ▪ Monitor groundwater conditions, as identified in the OM&M plan and/or subsequent DTSC-approved modifications.
▪ Minimize on-site human contact with groundwater containing COCs at concentrations exceeding the cleanup goals.	▪ Removal of saturated zone soil with COC concentrations identified as source material. ▪ Development and recording of the LUC.

Vadose zone soils with chemicals of concern above cleanup goals have been removed. Confirmation samples were collected from the vadose zone excavation sidewalls to demonstrate conformance with the cleanup goals as established in the RAP.

The remedy implementation occurred between March 2011 and April 2012, and consisted of the following key components:

- Installation and operation of an air monitoring system and air sampling program to evaluate the effectiveness of Site controls in maintaining the safety of the surrounding community.
- Installation and operation of a temporary soil vapor extraction and treatment system to remove volatile organics from the most impacted vadose zone excavation area.
- Relocation of a high-pressure natural gas line, from under the western sidewalk of Horton Street (i.e., adjacent to the excavation) to the other side of the street.
- Removal and offsite disposal of aboveground and underground structures, pipes, and debris containing arsenic, lead, and/or organic contaminants, primarily consisting of the raised cap and former water treatment plant.

- Excavation and offsite disposal of vadose zone soil containing arsenic, lead, and/or organic contaminants to support future potential residential use of the Site.
- Excavation and offsite disposal of saturated zone soil containing arsenic, lead, and/or organic contaminants to support long-term protection of groundwater.
- Excavation dewatering, and onsite pre-treatment and discharge to sanitary sewer of extracted water.
- Backfill of excavation areas to control groundwater movement within the Site.
- Placement of backfill and gravel cover to re-grade the Site to facilitate storm water drainage.
- Extension of the existing slurry wall along the southwestern portion of the Site.
- Installation of a membrane barrier and interceptor trench to prevent movement of groundwater from the S-W property to the Novartis property.
- Removal of portions of the existing slurry wall to control groundwater movement from the Site to offsite, downgradient (western) areas.
- Abandonment of a former underground storage tank (UST) at the Site.
- Abandonment of selected existing groundwater wells no longer required for the project.
- Installation of new groundwater wells required for the post-remedy implementation groundwater monitoring program.

The remedy implementation was completed by S-W's contractors, Envirocon Inc., Waste Solutions Group, and CDM Smith Inc., and their subcontractors.

This Completion Report provides summaries of the completed remedy components; documents variances in their implementation from that described in the RDIP; presents actual amounts and dispositions of waste; presents the results of the air monitoring and sampling; presents selected photographic documentation of pre- and post-remedy Site conditions; and, presents locations and plans for protection and monitoring of installed remedy components.

Variances from the RDIP are identified in this Completion Report with reference to the RDIP sections. For reference, the RDIP Table of Contents is included with this Completion Report as Attachment A.

This page is intentionally left blank.

Section 1

Documentation of Results

1.1 Locations and Quantities of Excavated Soil

The Asbuilt Drawings in Attachment B illustrate the final spatial boundaries of the excavation areas. Based on the actual weigh tickets returned from receiving landfills, 149,708 tons of soil and debris were removed from the Site. Of this amount, approximately 139,600 tons were removed to support the remedy; the preliminary estimate for waste disposal amount during remedy planning was 106,200 tons. The larger final quantity for soil removal to support the remedy is due to (1) the expanded excavation boundary in the main excavation area and (2) higher amounts of debris/concrete encountered resulting in relatively higher density to the excavation volume removed.

The approximately 20,148 tons of additional soil and debris removed from the Site were from activities that developed from the remedy implementation but did not directly support the RAOs, including:

- removal of underground utility pipes and overlying soils encountered during excavation, slurry wall extension, and activities pertaining to slurry wall breaches,
- removal of pavement, vadose zone soil, and buried concrete foundations within the northern portions of the S-W property to support storm water drainage, and
- removal of the water treatment plant (WTP), and underlying vadose zone soils, after completion of dewatering activities.

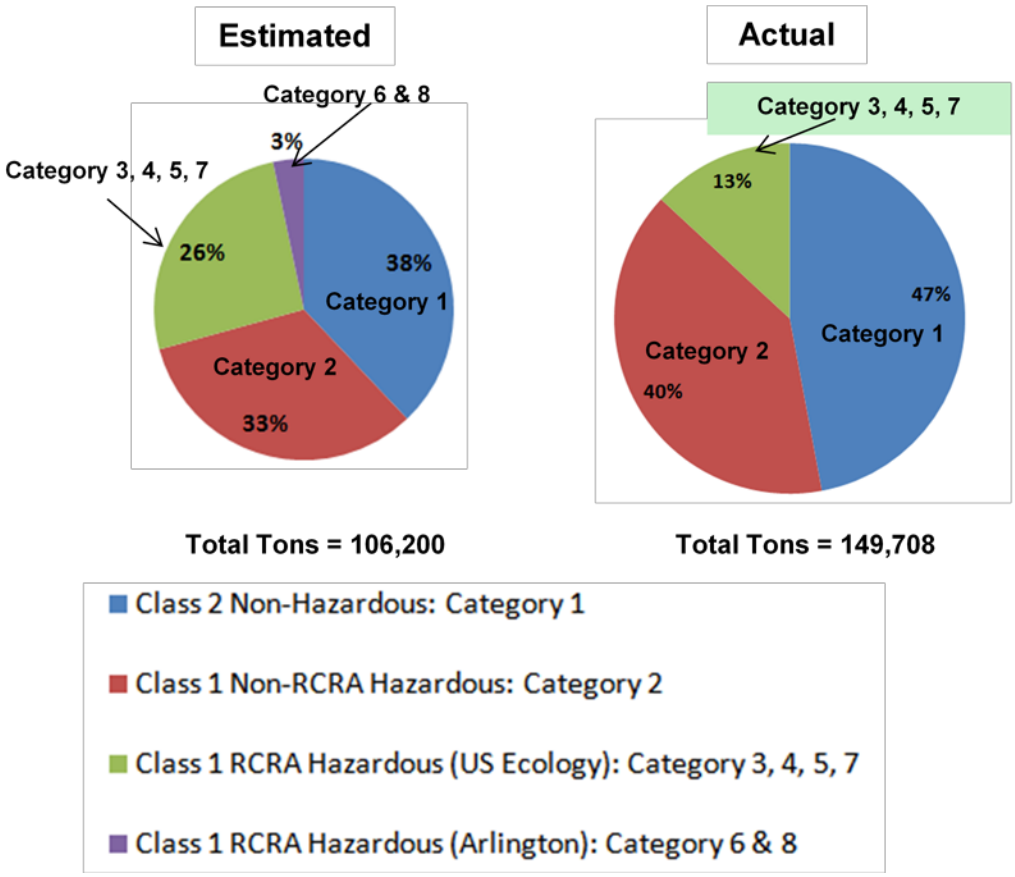
1.2 Amounts Disposed by Waste Characterization Profile

The RDIP identified eight possible project waste categories from the excavation, based on evaluation of in place sample results and state/federal hazardous waste regulations. The U.S. EPA waste classification for each category is described as follows:

- Category 1 - Class 2, non-hazardous waste.
- Category 2 - Class 1, non-RCRA hazardous waste.
- Categories 3 through 8 - Class 1, RCRA hazardous waste of various types.

The RDIP estimated amounts of materials for each of these eight categories. The materials for Categories 1 through 5 and 7 (see below) were transported to their designated facilities listed in the RDIP. Anticipated RCRA hazardous waste containing metal and organic underlying hazardous constituents with total volatile organic compounds at or greater than 500 mg/kg (Category 6 and 8) were not identified during stockpile characterization. No material was transported to the designated disposal facility for these two categories (in Arlington, OR). Hazardous waste was shipped under manifests with S-W EPA generator identification number CAD003934601. Non-RCRA and RCRA waste manifests are presented in Attachment J1 and Attachment J2, respectively.

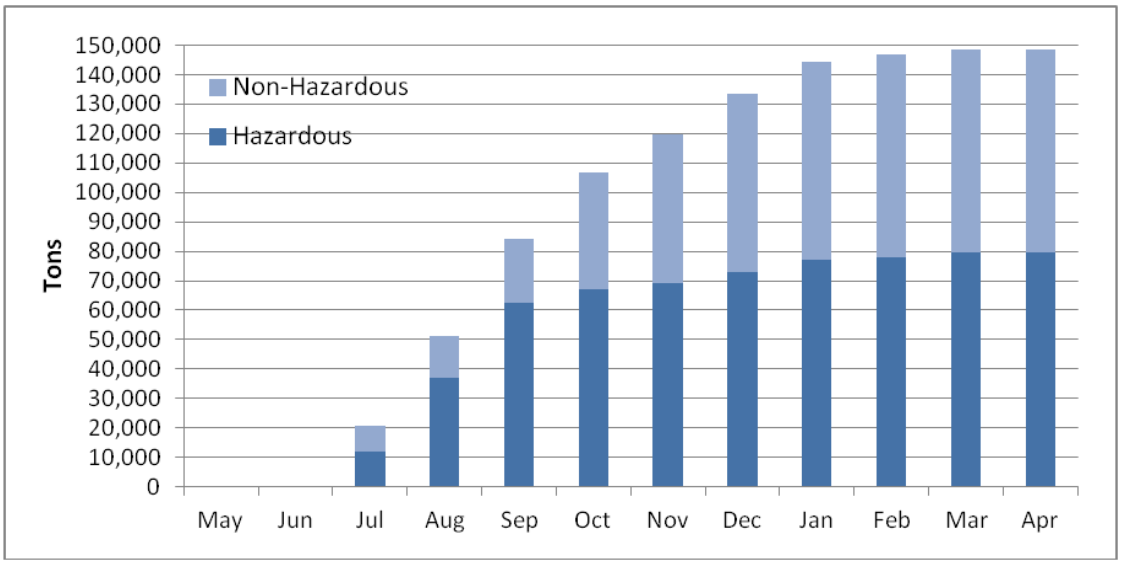
The two pie charts shown below reflect the percentages of waste disposal by category, as estimated in the RDIP and the actual disposition.



Final waste amounts removed from the Site are presented by their waste characterization results below and are based on reported weights received by the disposal facilities.

Waste Characterization	*Project Waste Category*	*Amount (Tons)*
Class 2 Non-Hazardous	1	69,671
Class 1 Non-RCRA Hazardous	2	60,650
Class 1 RCRA Hazardous (US Ecology)	3, 4, 5, 7	19,387
Class 1 RCRA Hazardous (Arlington)	6 & 8	0

The following chart presents excavated materials transported offsite (in accumulated tons by month):



The following summarizes total truck loads and rail cars by waste type:

Total trucks with non-hazardous waste loads out:	2,670
Total trucks with non-RCRA hazardous waste loads out	302
Total trucks with RCRA hazardous waste loads out:	4
Total rail cars with RCRA hazardous waste loads out	180
Total rail cars with non-RCRA hazardous waste loads out:	502

1.3 Soil Vapor Extraction and Treatment

In accordance with the RDIP and the Bay Area Air Quality Management District (BAAQMD) operation permit, the soil vapor extraction and treatment (SVET) system was operated prior to excavation activities. The extraction wells were installed between April 25 and 29, 2011 under an Alameda County Public Works Agency (ACPWA) permit, and the treatment system assembled during that same timeframe. The wells and treatment system were built in accordance with the RDIP. Startup of the system occurred May 2, 2012 and it operated for approximately six weeks until total VOC levels in the soil gas stabilized and DTSC approved the commencement of excavation activities. The wells were abandoned under an ACPWA permit by removal during excavation. Site permits are included in Attachment F.

Attachment D1 presents a summary of the daily total flow rate and total VOC measurements during the SVET operation. Total VOC measurements were one to three orders of magnitude higher than that anticipated in the RDIP. The constructed treatment system was able to handle this additional mass rate. Per the BAAQMD permit, bi-weekly samples were collected from the SVET system effluent stream. No VOCs were detected in any of these samples and reporting limits were below permit requirements. Site permits are included in Attachment F.

1.4 Air Quality Monitoring Results

Throughout the remediation activities, as described in RDIP Section 14, air quality on and surrounding the Site was monitored and the results submitted to DTSC in weekly and monthly reports, and in daily reports for the first several weeks. Air quality monitoring reports submitted were posted to the DTSC website where they are available for review (DTSC Envirostor, 2012) and are provided in Attachment C.

The airborne concentrations of Total Volatile Organic Compounds (TVOC) and Respirable Particulate Matter of 10 microns or less (RPM10) for the air monitoring stations were below the project action levels as presented in the charts in Attachment D2.

RPM10 readings from the air monitoring stations ranged from 0.0 micrograms per cubic meter ($\mu g/m^3$) to 432 $\mu g/m^3$ and averaged less than acute RPM10 action levels for any 4-hour period as established for the phases of the excavation: raised cap removal, vadose zone soil removal, and saturated soil removal. During the monitoring, the running average for RPM10 readings from the start of the project was less than the subchronic RPM10 action level (see charts in Attachment D2).

TVOC readings from the air monitoring stations ranged from 0.0 parts per million volume (ppmv) to 12.8 ppmv and averaged less than 1.80 ppmv for any one 24-hour period, which is less than the acute TVOC action level. During the monitoring, the running average for TVOC readings from the start of the project was less than the subchronic TVOC action level (see charts in Attachment D2).

Shortly after startup it was determined the perimeter misters, being used for odor and vapor control, located adjacent to the air monitoring stations were impacting the RPM10 readings. The very low particle sizes of the mist were being included in the monitor's readings. Through a DTSC-approved protocol for daily calibration of the incremental increase in RPM10 readings due to the effects of the misters, a daily adjustment to the action level for AMS #3 was applied. Near the end of October, as the misters were no longer in use, calibration and daily adjustment of the action level were discontinued. As the RPM10 chart indicates this adjusted action level had no relevance to the running average over the length of the project. The correspondence with DTSC regarding the daily calibration of the AMS#3 action level is provided in Attachment D2.

During the first six weeks of excavation, daily air samples were collected at several of the AMS locations for laboratory analysis of arsenic, lead and volatile organic compounds in conjunction with the real time monitoring of TVOC and RPM10 readings at seven AMS locations. These laboratory results verified that the derivations of the action levels for real-time monitoring were protective of the surrounding community. The daily collection of air samples was discontinued, with DTSC approval, after demonstrating that Site controls were keeping chemical concentrations in perimeter air below established performance standards. In addition, the real-time TVOC and RPM10 monitoring at the seven AMS location was determined to be acceptable for assessing air quality and protection of surrounding community. The DTSC approval letter is provided in Attachment D2.

On March 5, 2012, the perimeter air monitoring system was taken offline and replaced with local air monitoring using handheld units. This modification to the air monitoring program was previously approved by DTSC on March 1, 2012. The perimeter air monitoring system was subsequently decommissioned and demobilized from the Site in March 2012.

Local air monitoring was conducted within the Site during waste handling activities in March 2012, at breathing level heights outside and downwind of the exclusion zone. The local air monitoring during

this period and its results are discussed below; no action levels were exceeded during the activities. No waste handling activities requiring local air monitoring occurred in April 2012. Wastes materials transported offsite in April 2011 were in closed drums or boxes without potential for dust or vapor generation.

RPM10 readings during waste handling activities in March 2012 from handheld units ranged from 0.0 µg/m^3 to 490 µg/m^3 and averaged less than 45 µg/m^3 for any 4-hour period, which is less than the acute RPM10 action levels for activities: vadose zone soil removal and saturated soil removal. The readings maintain the running average for RPM10 since the start of the project to be less than the subchronic RPM10 action level.

TVOC readings during waste handling activities in March 2012 from handheld units ranged from 0.0 ppmv to 11.8 ppmv and averaged less than 0.40 ppmv for any one 24-hour period, which is less than the acute TVOC action level. The readings maintain the running average for TVOCs since the start of the project to be less than the subchronic TVOC action level.

1.5 Vadose Zone Soil Confirmation Sample Results

Vadose zone soil confirmation samples were collected and analyzed for arsenic, and compared to its cleanup goals for two areas of the Site:

- The main excavation area, and
- The four "hot spots" and former UST excavation areas.

The cleanup goal consists of the 95UCL of the arsenic results from the confirmation samples be less than 24 mg/kg, with no arsenic result exceeding 100 mg/kg. The results confirmed that the final excavation extents had removed vadose zone soils with arsenic above the cleanup goal. Confirmation samples collected from the vadose zone excavation sidewalls demonstrate conformance with the cleanup goal. A summary of these two sets of data is presented in Attachment D3.

Samples were collected from the excavation sidewalls in accordance with the RDIP. See Attachment B for Asbuilt Drawings showing the main excavation vadose soil confirmation sample locations. Attachment D3 presents the sidewall location information for each "hot spot" excavation vadose zone soil confirmation sample.

For the main excavation area, one sample was collected approximately every 50 feet along the sidewalls at random depths. Samples were collected during two separate events.

Around mid-September 2011, with DTSC approval, it was attempted to demonstrate attainment of the vadose zone cleanup goal prior to completing the western vadose zone excavation design extent presented in the RDIP; design excavation had been completed along Horton Street and the northern and southern extents. As such, 19 sample locations – spaced approximately every 50 feet – were identified around the perimeter of the excavation extents at this time, with location 1 in the southeast corner, along Horton Street, moving clockwise to location 19 in the northeast corner of the excavation, again along Horton Street. Results from samples 1 to 5 and 15 to 19 were below the cleanup goal, with arsenic results ranging from 3.8 mg/kg to 31 mg/kg. Results from samples 6 to 10 and 13 to 14 are no longer representative because further excavation was conducted in response to the high arsenic results from samples 8, 9, 10, 13, and 14, which ranged from 52 mg/kg to 1,100 mg/kg. Given

these high results, samples from locations 11 and 12 were not collected and additional excavation was conducted at these areas.

After the additional excavation, vadose zone confirmation samples were collected along this new western extent in late November 2011, at locations 20 to 29. Results from samples 21 to 29 were below the cleanup goal, with arsenic results ranging from 4.1 mg/kg to 54 mg/kg. Result from sample 20 is no longer representative because further excavation was conducted in response to its high arsenic result of 115 mg/kg.

Four "hot spots" were located and sampled based on previous soil boring sample results exceeding 100 mg/kg arsenic in the vadose zone outside the main excavation, as presented in the RDIP. "Hot spots" were named based on these previously associated soil borings: SA-BH-04, SA-AH-01, CDM-SB50, and SB-7AB. The locations of these four "hot spot" excavations are presented in Attachment B.

The results for the north, east, and west wall sidewall samples from "hot spot" SA-BH-04 were below the cleanup goal. The arsenic results ranged from 5.4 mg/kg to 29 mg/kg. The south wall sample result of this "hot spot" exaction is no longer representative due to subsequent additional excavation conducted for an underground pipe removal. No additional sample was collected along the south wall as the excavation progressed to the Sherwin-Williams property line with the City of Emeryville Parcel D site, where soils had been removed previously by the City of Emeryville and replaced with imported backfill.

Results for sidewall samples from "hot spot" SA-AH-01 were below the cleanup goal. Arsenic results ranged from 7.7 mg/kg to 9.4 mg/kg.

Initial north, east, and west sidewall samples from "hot spot" CDM-SB50 were above the cleanup goal, with arsenic ranging from 50 to 370 mg/kg. The south sidewall sample was below the cleanup goal, at 21 mg/kg. Additional excavation was conducted towards the north, east, and west, and this "hot spot" was incorporated into the main excavation toward excavation to the east. After the additional excavation, vadose zone confirmation samples were collected along these new extents to the north and west. These results were below the cleanup goal, with arsenic of 21 mg/kg and 9.9 mg/kg, respectively. The eastern extent of the "hot spot" was connected to the main excavation, and there no longer was an eastern sidewall to sample.

Initial results for south sidewall samples from "hot spot" SB-7AB did not meet cleanup goal, with arsenic ranging from 55 to 77 mg/kg. After further excavation of the south sidewall, an arsenic result of 24 mg/kg was obtained. With the north, east, and west sidewall arsenic results of 9.6 mg/kg to 29 mg/kg, the final sidewall sample results were below the cleanup goal.

Due to changes in the extent of the main excavation (discussed further in Section 2), one of the "hot spot" excavation areas was incorporated into the main excavation ("hot spot" excavation for boring CDM-SB50) for comparison to its cleanup goal.

At DTSC's direction, sidewall samples from the former UST excavation for arsenic were incorporated with those from the "hot spot" excavation areas for comparison to its cleanup goal.

1.6 Groundwater Monitoring and Sample Results

In accordance with the RDIP, monthly depth to groundwater measurements and quarterly groundwater samples were collected from specified wells. A summary of these results are presented in Attachment D4.

The monthly water levels demonstrated the affects from the excavation dewatering activities as lowered groundwater elevations were observed in wells away from the excavation extents. These results were part of the rationale used to eliminate the need for the French drain and continue to meet the objectives of excavation and backfill (further discussed in Section 2).

Quarterly sampling consisted of analysis for arsenic and VOCs. The RAP established two triggers during remedy implementation for additional post-remedy action:

1. If arsenic exceeds 500 µg/L in any sample/well during remedy implementation, an additional well on former Rifkin well would need to be installed (as specified in RDIP Figure 13-1).

2. If arsenic exceeds its historical maximum detection during remedy implementation, quarterly sampling of that well would be maintained until stable or decreasing trend is determined.

The first trigger did not occur; therefore, an additional well was not installed on the former Rifkin property.

The second trigger occurred at wells RP-1, RP-4, and MW-3 during the remedy implementation, as presented in Attachment D4. These three wells are identified for quarterly sampling in the project OM&M plan.

1.7 Underground Storage Tank Abandonment

Working with DTSC and Alameda County Department of Environmental Health (ACDEH), a tank closure plan was developed for the former UST. The closure plan was developed during an onsite meeting on February 22, 2012. At that time, it was understood that the former UST had been abandoned in place during the slurry wall installation in 1993, as previously reported. Excavation was conducted around the former UST to determine if it would be feasible to remove the abandoned UST, presumed to have been previously filled with grout. However, it was discovered that the former UST had not been abandoned in place. In addition, it was observed that a portion of the former UST was underneath the Site transformer and therefore could not be removed without providing structural support to the transformer. The top of former tank was measured at El. 13.3 ft North American Vertical Datum of 1988 (NAVD88).

As agreed upon by DTSC and ACDEH, the former UST closure consisted of abandoning it in place. As instructed by ACDEH, the tank interior was rinsed to remove sludge and to clean the interior walls. The former UST was filled with neat cement on February 24, 2012. An ACDEH representative observed the tank cleaning, documented that the tank interior was sufficiently cleaned, and observed the filling with neat cement. Approximately 12 cubic yards of neat cement were poured into the former tank, which is consistent with the dimensions of the former UST. During filling of the former tank, lighter material coming to the surface from the former tank interior was not observed, confirming the former UST had been cleaned sufficiently.

At the direction of DTSC, potential impacted vadose zone soils were excavated around the former UST to approximately El. 10 ft NAVD88: north along the transformer pad, east toward the Site building until underground water lines were encountered, south into the arsenic "hot spot" excavation, and west into the existing excavation for railroad and storm sewer demolition. Excavation surrounding the former UST was conducted to the extent possible with the engineering constraints of the transformer pad, existing waterlines and Site building. See Attachment B for Asbuilt Drawings showing the footprint of the excavation around the former UST.

Vadose zone soil samples were collected along the north, east, northwest and northeast sidewalls of the excavation. Soil samples on the southern portion of the excavation were collected as part of the arsenic "hot spot" excavation. One groundwater sample was collected on western, downgradient side of the former UST by creating a two-foot sump in this area of the excavation bottom (i.e., below the vadose zone soil). Groundwater elevation was approximately El. 9.7 ft NAVD88 at the time of sample collection.

As directed by DTSC, sidewall vadose zone soil and groundwater grab samples were collected for analysis of arsenic, lead, total petroleum as gasoline (TPH-g), diesel (TPH-d), and motor oil (TPH-mo), volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs). With DTSC approval, TPH-d and TPH-mo analyses were conducted with silica gel cleanup.

The arsenic results from the sidewall vadose zone soil samples are discussed in Section 1.6 along with the other vadose zone soil confirmation results. These results conform to the Site cleanup goal. Attachment D5 presents a summary of the other results from the sidewall soil samples and the groundwater sample, and provides a comparison to the Site cleanup goals. Of these other results, TPH-d in soil and TPH-g, TPH-d, TPH-mo, and arsenic in groundwater were found above their Site cleanup goals.

After sample collection, the former UST excavation was backfilled consistent with other vadose zone excavation areas at the Site.

1.8 CEQA Mitigation Measures

Two CEQA mitigation measures were identified for the project and were monitored during the remedy implementation as described below.

1.8.1 Cultural Resources Monitoring Results

Archaeological monitoring was undertaken during soil-disturbing activities, when excavating from El. 18 ft NAVD88 to El. 6 ft NAVD88, including removal of asphalt caps and buried concrete and debris and removal of existing slurry walls and groundwater monitoring wells at the Site from July 1-August 8, 2011. Archaeological monitoring during soil-disturbing activities did not identify prehistoric or historic archaeological materials with a potential for significance under CEQA. The Archaeological Monitoring Report, prepared for S-W by the archaeological monitors at URS, is included with this Completion Report as Attachment E.

1.8.2 Park Avenue Street Beautification Project

Due to project-related truck-traffic, the City of Emeryville Park Avenue Street Beautification Project was impacted by the legally loaded truck traffic travelling along the City of Emeryville truck route over the recently finished Park Avenue and Halleck Street intersection. A set of bricks inlaid in the pavement at this intersection were prematurely damaged (chips and cracks) due to the increased

truck-traffic. This assessment was based on comparing the conditions of these bricks after remedy implementation to pre-remedy photographic documentation. The damaged bricks were replaced with new bricks during the week of June 11, 2012. The City of Emeryville provided the new bricks and specifications for installation.

1.9 Permits and Clearances Obtained

1.9.1 RDIP Section 2.2, Permitting

Envirocon or CDM Smith obtained the following permits, which are included in Attachment F, associated with the remedy implementation work:

Permit	*Permit Number*
Alameda County Department of Environmental Health-Underground Tank Closure Permit	SR0020135
Alameda County Public Works Agency-Water Resources Well Permit	W2011-0213 to W2011-0264, W2011-0398, W2011-0399, W2012-0105 to W2012-0107, W2012-0126 to W2012-0139, W2012-0159
BAAQMD Permit to Operate for Soil Vapor Extraction and Abatement System	Application: 23044 Condition: 24917 Plant: 20614
BAAQMD Permit to Operate for Facility-Wide Soil Excavation Project	Application: 23244 Condition: 24986 Plant: 20716
BAAQMD Notification for Water Treatment Plant Demolition and Acknowledgement	Regulation 11, Rule 2
City of Emeryville Grading Permit	G2011-0001
City of Emeryville Shoring Permit	B2011-0031
City of Emeryville Water Treatment Plant Demolition Permit	B2011-0257
City of Emeryville Encroachment Permits	21105121, 21105122, and 21107136
East Bay Municipal Utility District Wastewater Discharge Permit	50372992
OSHA Excavation Notification Permit	2011-904305
Water Quality Control Board, San Francisco Bay Region, Notice of Intent for Coverage under the General Construction Storm Water permit	Application: 415037 WDID: 2 01c361055

Work was conducted in compliance with the requirements and/or conditions established in these permits. City of Emeryville permits were closed with and signed by the City of Emeryville. Other permits were terminated with the respective agency or not renewed at the end of the project.

1.9.2 RDIP Section 2.3.2, Community Safety Plan

The Community Safety Plan, approved as part of the RDIP and included as Appendix B of the RDIP, was successfully implemented during the phases of the remediation activities.

A toll-free, 24-hour community complaint telephone answering service was activated as part of the Community Safety Plan. During the course of the remediation activities, the service logged over 50 calls from 10 individuals within the neighborhood. The project team personally responded to each call by calling the individual the same day. In several cases phone messages were left in lieu of

reaching the caller. In such cases follow up calls with the individual were done within the next day. The responses to the community calls were done in coordination with DTSC as appropriate. The calls were responded to and no open issues are remaining.

The calls and responses were documented in the monthly status reports.

1.9.3 RDIP Section 3.4, Clearance and Relocation of Utilities

Underground Service Alert (USA) was contacted according to the RDIP procedures. The following USA ticket numbers were obtained for the clearances performed:

USA Clearance Area	*Ticket Number*
For asphalt removal and replacement on Halleck Street	080637
For Parcel D excavation	342110
For excavation along Horton Street	047933
For monitoring well installation	0041212, 0073275, 0073316
For BAAQMD construction and operation of SVE system	0111814

This page intentionally left blank.

Section 2
Variances from RDIP

The RDIP presented engineering and monitoring details regarding the planned remedy implementation activities as anticipated with the information available at the time. Based on field conditions encountered at the time of implementation, some of the engineering and monitoring details were modified in order to maintain the effectiveness of the remedy. The information presented in this section identifies only those details that varied in some way from RDIP. Section references presented here identify the specific sections of the RDIP, and in some cases refer to additional information in attachments to this Completion Report.

For reference, the RDIP Table of Contents is included with this Completion Report as Attachment A. Only RDIP Sections with variances are presented below.

2.1 RDIP Section 3 – Pre-Excavation Activities

2.1.1 RDIP Section 3.2, Groundwater Monitoring Well Abandonment

Table 3-1 of the RDIP listed the groundwater wells planned for abandonment. These wells were abandoned under permit and reports for the abandonments were submitted to ACPWA, except well LF-6. LF-6 was determined to have been previously abandoned and its status was confirmed with ACPWA. Copies of these reports are included in Attachment G1. Site permits are included in Attachment F. One deviation from the RDIP was that in addition to abandonment of wells by (1) drill out with tremie grout backfill or (2) in-place abandonment via tremie grout and removal of well vault, some wells were removed completely during excavation. This was approved by ACPWA. .

2.1.2 RDIP Section 3.6, Subsurface Vapor Extraction and Treatment

The SVE system was installed and operated in accordance with the RDIP. The original schedule for operation of the SVE system was estimated for no more than 4 weeks. However, the system operated for 6.5 weeks in order to remove additional mass of subsurface organic vapors.

2.2 RDIP Section 4 – Raised Cap Removal and Shoring

2.2.1 RDIP Section 4.1, Removal of Raised Cap

The actual sequencing of Raised Cap removal differed from the RDIP text (see last paragraph of this particular RDIP section) to accommodate scheduling changes for the shoring installation subcontractor and overall excavation logistics on the Site.

2.2.2 RDIP Section 4.3, Shoring along Horton Street and Building 31

Two of the installed soldier beams (beams numbered 2 and 3) for the shoring wall met refusal while being vibrated into place. These two beam installations were reviewed by the project structural engineer and approved as installed.

Timber lagging for the shoring wall was not necessary in the bottom five feet of the deepest excavation areas due to a change in the excavation sequence. Excavations along these areas were originally to be conducted in the middle of the main excavation activities. It was actually conducted at the end and removed in small sections and backfilled immediately, allowing for sufficient support of

the shoring wall at these depths. Sumps at both ends of the deep excavation area were installed and continuous pumping was conducted to lower the hydraulic gradient along the shoring wall.

The RDIP allowed for the installation of tie-backs. It was initially planned, during the RDIP preparation, that tie-backs would not be allowed by the City of Emeryville to be left in place once the excavation was completed. Therefore, the RDIP indicated that "No shoring elements will remain". However, during finalization of the RDIP, the City of Emeryville approved and permitted the use of tie-backs, and for them to be left in place. These tie-backs were cut, during removal of the shoring wall, and the portions under Horton Street were left in place. Locations of the remaining portions are presented in Attachment B. Site permits are included in Attachment F.

2.3 RDIP Section 5 – Excavation and Dewatering

2.3.1 RDIP Section 5.1, Excavation Dewatering

The RDIP text in this section included an estimate that excavation water would be pumped at an average steady state rate up to 10 gallons per minute (gpm) following the initial higher flow rate at the start of excavation. In using a series of sumps with interconnecting ditches, the actual dewatering rate averaged 30 to 35 gpm, with periods of peak flow around 60 gpm. The higher actual dewatering rates encountered during remedy implementation, compared to the RDIP steady-state estimate, are due to the following factors:

- Dewatering operations conducted on an episodic basis with shutdowns during night shift and over other down times. [1]
- RDIP steady-state estimate included only groundwater flow from the A-aquifer and did not estimate process wastewater, water from daily dust control and misting operations, storm water, or surface water component. Significant flow rates of storm water were experienced during the remedy implementation, particularly in October and November 2011.
- RDIP steady-state estimate did not include any vertical groundwater leakage induced from the B-aquifer into the excavation. The dewatering operations maintained significant drawdown of the water levels in the A-aquifer within the excavation and in the surrounding cone of depression, and increased vertical movement from the B-aquifer into A-aquifer.

With inherent uncertainty in all modeled geologic settings, the higher than estimated dewatering rate could indicate hydrogeologic characteristics may need to be reevaluated to understand post-remedy implementation groundwater flow pathways.

The post-remedy implementation groundwater monitoring program (discussed in Section 2.10 of this report) is structured to provide the data necessary for evaluating flow direction and hydraulic gradient. As the A-aquifer reaches equilibrium re-saturation, the groundwater flow conditions will be compared to the projected design groundwater model conditions for the remedy. If the assessment determines that groundwater movement patterns differ significantly from projected design

[1] A total of 4,892,618 gallons were pre-treated and discharged to the sewer between the start of continuous dewatering operations (22 July 2011) and when the maximum depth of the excavation was reached (30 November 2011). Over this 132 day period, an average discharge rate of 25.7 gpm was observed.

conditions, S-W will provide written recommendation to DTSC for either implementation of additional monitoring/investigation steps or a contingency action.

During the remedy implementation, over five million gallons of water in total were pre-treated and discharged to East Bay Municipal Utility District (EBMUD) under permit. Quarterly reports were submitted to EBMUD to document the results from dewatering and pre-treatment system and adherence to their permit, and are included in Attachment H. Site permits are included in Attachment F.

2.3.2 RDIP Section 5.3, Soil Excavation and Handling

Actual soil removal sequencing varied from the plan presented in the RDIP text to accommodate improved Site logistics for rail car transport; high-pressure natural gas transmission line relocation; excavation dewatering; and soil stockpile handling. Due to the spatial variability of the waste categories it became crucial to excavate areas of similar categories to meet rail car transport requirements. Also, the mass excavation of similar waste categories lowered the potential for cross contamination of soils with differing preliminary categories. These objectives required modifying the RDIP method of "strip" excavation spanning the entire length of the excavation across multiple waste categories.

The RDIP described installation of a temporary "French drain" at the bottom of the excavation along the northern S-W property line with the Novartis parking lot (the former Rifkin property). The intent of this drain line was a safety measure to control groundwater seepage in the open excavation and prevent it from migrating northward across the property line into newly placed clean backfill. Subsequent calculations, modified excavation and backfilling methods, and discussions with Novartis and DTSC determined that this temporary drain line was not required to control groundwater migration during the short amount of time the excavation depth was exposed. The groundwater gradient was maintained in a positive direction away from the Novartis property and verified by increased monitoring of the potentiometric water surface in wells, sumps and at the seepage face elevations. Groundwater monitoring data are provided in Attachment D4.

The final soil excavation areal footprint is illustrated on the Asbuilt Drawings provided in Attachment B. The final bottom excavation contours are also provided in the Attachment B Asbuilt Drawings.

2.3.3 RDIP Section 5.3.1, Vadose Zone

As described in this RDIP section, additional vadose zone soil removal was anticipated if data from soil sample analyses indicated continued high arsenic or other constituent concentrations. Actual excavation included extending soil removal beyond RDIP preliminary projected extents to areas containing arsenic concentrations above the cleanup goal. The additional vadose zone soil removal included the areas northwest and west area of the RDIP identified area. The removal of vadose material in these areas was also to facilitate the removal of additional saturated soil as discussed below. Conversely, several "cells" of in-place soil were not excavated according to the RDIP plan because soil sample results confirmed that in-place constituent concentrations already met the cleanup goals.

Vadose zone soils within the four "hot spot" excavations were removed per the RDIP. The lateral extend of a number of the sidewalls in these locations coincided with other soil removal for utility demolition, rail spur demolition and slurry wall extension. In these cases the remaining sidewalls were confirmed below the cleanup goals. As such, the "hot spot" excavation for boring CDM-SB50 was

merged with the main excavation, and included in that soil sample results set. The three other "hot spot" excavations continued to be evaluated independently.

Confirmation soil sample results demonstrating conformance with the cleanup goals are presented in Attachment D3.

2.3.4 RDIP Section 5.3.2, Saturated Zone

The RDIP presented a concern regarding heaving of the excavation floor at the top of the A/B aquitard (El. -11 ft NAVD88), which resulted in the preparation and inclusion of a Heave Management Plan (RDIP Appendix I-2). As discussed above in RDIP Section 5.3.1, mass excavation of similar category waste was utilized for saturated soil excavation rather than the "strip excavation" presented in the RDIP. However, this did not affect the excavation conformance to the RDIP objective of minimizing the exposed areal floor of the excavation above the aquitard to no more than 5,000 square feet at any moment. The bottom five feet of saturated soil above the aquitard was excavated and backfilled concurrently, never leaving more than 5,000 square feet of the top of aquitard exposed.

The exposed lithology during saturated soil excavation was observed to confirm final source area removal extents for permeable materials along the sidewalls of the excavation. Portions of the western extent of the design excavation boundary had greater than 4 feet of sand/gravel (permeable materials) in areas identified with having arsenic concentrations in groundwater above 1 mg/L prior to the remedy implementation. As such, additional saturated soils were removed in these areas until total permeable material amounts were less than 4 feet. At the other extents of the excavation, less than 4 feet of sand/gravel were observed. The final extents of the saturated soil excavation are presented in Attachment B.

2.3.5 Section 5.5, Waste Stockpiles Management

The project simultaneously tracked and managed in excess of over 160 waste stockpiles. The RDIP estimated that approximately 5,000 cubic yards of stockpiled waste material may be on Site at any one time, as inventory staged between placement, characterization, and load out. Due to the segregation of eight different potential waste streams from the excavation and to avoid unwanted delays for rail car transport, the stockpiled volumes maintained onsite increased up to approximatly12,700 cubic yards for short periods of time. On average, stockpiled waste amounts were much smaller, close to the RDIP estimate of 5,000 cubic yards.

Due to the limitations of space and to avoid extending the project schedule any further than necessary, every effort was made to minimize the amount of stockpiled waste present onsite at any given time. Waste characterization turnaround times were accelerated from planned RDIP schedules in an effort to minimize the onsite stockpiling of material. Much of the stockpiled volume was due to the separate stockpiling of multiple categories of waste, while limited to the loading of a single waste category in multiple train cars (unit trains) intended for a single location.

2.3.6 RDIP Section 5.6, Vadose Zone Soil Confirmation Sampling

The only variance to the RDIP sampling procedures described in this section was that some samples were also collected using 8 oz. jars, instead of sample tubes. Sampling materials were sample specific so no equipment blanks were necessary. Confirmation soil sample results demonstrating conformance with the cleanup goals are presented in Attachment D3.

2.4 RDIP Section 6 – Excavation Backfilling

2.4.1 RDIP Section 6.4, Backfill Placement, Compaction and Interceptor Trench

The variance to the RDIP is that the width of the curtain wall for the inceptor trench was reduced from 36 inches to 30 inches. A sensitivity analysis on this modification did not show any significant change to the modeled groundwater flow paths.

2.4.2 RDIP Section 6.5, Membrane Barrier and Trench Installation, RDIP Section 6.5.1, Selection of Material

Busan 1058 was used instead of Busan 1059WS Biostat (Dazomet) for extension of the biopolymer slurry used during installation of the membrane barrier.

As part of the HDPE Membrane Barrier installation, Envirocon also installed a geonet HDPE drain fabric on the HDPE panels to help protect the panels against punctures from the placed drain gravel. The drain gravel selected for the trench had both the required natural filtering requirements for the hydraulic design of the trench and a consistent particle size. This minimized "layering" of the gravel during placement in the bio-polymer slurry. The selected gravel had a slight angular shape; it was anticipated to be well rounded in the RDIP. The geonet was installed to protect the membrane liner from potential damage from the drain gravel. The geonet is expected to have a higher transmissivity than the drain rock and therefore reduce the hydraulic pressure on the membrane, further protecting the membrane.

SDR 17, 6-inch diameter rigid HDPE, pipe was installed at the base of the interceptor trench, instead of the proposed flexible pipe stated in the RDIP. This rigid pipe was required as it had sufficient pipe strength to work with the installation method and selected gravel.

2.4.3 RDIP Section 6.7, Panel Placement

The Curtain Wall panels (fabricated by GSE Lining Technology) that comprise the membrane barrier system were installed as intended, to depths below the top of the aquitard in order to prevent movement of A-zone groundwater from the S-W property toward the Novartis property at this shared property line. The bottom of the panel elevations ranged between El. -12 ft NAVD88 to El. -14.5 ft NAVD88. The top of the aquitard is at approximately El. -11 ft NAVD88 in the project area.

The RDIP Section 6.5 indicates that "[t]he bottom of the membrane barrier will be placed adjacent to the north wall of the excavation as to achieve direct contact with the undisturbed soil or compacted backfill." During field installation activities, the steel frames holding the panels during placement were lowered adjacent to the north wall of the excavation trench and were lowered to depths equal to or greater than the top of the aquitard. Each panel placement, subsequent to the first one, was joined to adjacent panels, in accordance with the specifications. Due to the method of placement and the required use of the biopolymer slurry, however, actual "direct contact" of the panels with the trench bottom could not be confirmed by direct observation.

In lieu of direct observation, the bottom elevations of the placed panels were compared to the target trench bottom elevation using the following measurements: GPS surveys of the tops of installed panels and surrounding ground surface, previously measured panel heights, and depths to the trench bottom (conducted prior to panel placement using a weighted rope). Measurements for 5 of the 11 panels that comprise the membrane barrier system indicated that the panels were lowered to the target trench bottom elevation when released from their frames. For 6 of the 11 panels, measurements

could not confirm that the bottom of the panel frames reached the actual trench bottom. Fine-grained deposits, from the compacted backfill trench sidewalls, settling out from the slurry and accumulating at the trench bottom during panel installation is believed to have affected the assessment for reaching the target trench bottom elevation at these six panels. For all panel placements, however, the panel frame bottoms were determined to reach depths below the top of the aquitard at El. -11 ft NAVD88.

2.4.4 RDIP Section 6.8, Drain Pipe and Gravel Backfill Placement

A pea gravel (3/8 inch minus) material was used for the bedding material beneath the interceptor trench drain pipe. This was a modification from the RDIP specified "drain gravel" gradation specification. Due to the placement of pipe bedding being dropped from the top of the trench in the presence of the bio-polymer slurry, a pea gravel material was used. The pea gravel has a more uniform particle size and can achieve the desired compaction values compared to the more "well graded" drain gravel as specified in the RDIP for permeability and self-filtering design, as installed.

2.5 RDIP Section 7 – Slurry Wall Breach

2.5.1 RDIP Section 7.3, Slurry Wall Breach

The final design of the three slurry wall breaches varied from the design presented in the RDIP, to accommodate improved constructability and to avoid installing the northwestern breach across the western property boundary with Union Pacific Railroad. The breach design revisions maintained the required transmissivity necessary per the groundwater flow modeling. The location of Breach 3 was moved to the east in order for it to be in adjacent with saturated soil excavation. The asbuilt design and locations of the slurry wall breaches are included in Attachment B. This change was reviewed and approved by DTSC.

2.5.2 RDIP Section 7.5, Trench Excavation

Actual trench excavation procedures differed from the RDIP text due to the redesign of the slurry wall breaches, therefore reference to biopolymer slurry in the cross trenches and the up- and down-gradient trenches are no longer applicable. See Attachment B for the asbuilt design and locations of the installed breaches.

2.5.3 RDIP Section 7.6, Backfill Placement

References in the RDIP text to the up and down gradient and cross trench backfilling are no longer applicable due to the breach redesign.

2.6 RDIP Section 8 – Slurry Wall Extension

2.6.1 RDIP Section 8.4, Slurry Wall Extension

The actual slurry wall extension was 675 feet long; the RDIP estimated a length of 494 feet. The extension was brought into the existing slurry wall further north than originally designed to accommodate installation closer to the property line (further west). This change was reviewed and approved by DTSC.

The actual slurry wall thickness, in accordance with approved design modifications, was 30 inches; the RDIP text indicated a minimum wall thickness of 36 inches. A sensitivity analysis on this modification did not show any significant change to the modeled groundwater flow paths.

The slurry wall extension also included design and installation of a slurry wall cap, to protect the bentonite-based slurry wall from damage due to future active surface loads. The slurry wall cap was also of similar low permeable clay soil to allow for a higher impermeable wall height. See Attachment B for the slurry wall extension asbuilt location and installation details.

2.7 RDIP Section 9 – Waste Profiling, Transport and Disposal

Aside from the sample tubes presented in the RDIP for stockpile sample collection, 8 oz. glass jars were also used. In discussions with the lab, En Core® and Terra Core® samplers from the Site could not be composited without losing significant VOCs that may be present. The laboratory recommended that samples for VOCs be taken from the tubes or jars and composited the same day in EnCore® samplers by the laboratory. The sampling materials were designated to each sample and no sampling equipment was re-used, so no QC samples were taken or necessary.

The amount of truck loads/tons and rail car loads/tons exceeded the original estimate. A variance to the RDIP is that truck beds were not lined with plastic or straw when trailers were being loaded with non-hazardous material. Material was placed onto truck beds directly and covered for exporting. The non-hazardous material being placed in the truck trailers passed the wet paint filter test and passed through the decontamination pad where the loads were inspected prior to leaving the Site.

Another variance to the RDIP is that dry decontamination methods were used when trucks exited the Site. Stiff brushes were used to clean tires while stopped on the decontamination pad. The trucks being loaded for export of waste material were limited to hard surface travel and daily removal of spilled soil from the truck route was performed. MEC sprayers were used to spray tires while on the decontamination pad on rainy days or days with an excess of mud on the truck path.

At the final stages of the project it became necessary to begin removal of the Site rail line and spur track at the north end of the property to begin final backfill and grading in these areas. Without the access to the adjacent Union Pacific rail yard, final loads of non-RCRA hazardous waste (California regulated) were loaded on trucks for transport to the San Francisco Bay Railroad (SFBR) for loading onto rail cars for final transport. This transportation variance was approved by DTSC and the community was informed of this activity.

During loading of non-hazardous waste to the local Class 2 non-hazardous waste landfill, approximately 20 loads of non-RCRA hazardous waste were mistakenly transported by truck to the Class 2 landfill. The transport of this material was identified within hours of leaving the Site, and arrangements with the landfill were made to isolate and contain the waste for removal and transport to the SFBR for transport by train to the appropriate landfill facility. A total of 334.26 tons of waste were initially delivered to the Class 2 landfill. In order to assure complete removal of this waste, approximately 12 tons of additional material around and beneath it were excavated; totaling 342.41 tons. This waste was taken to the SFBR for transport by train to the appropriate landfill.

Final waste amounts removed from the Site were based on stockpile sample results and are presented by their waste characterization results below, based on reported weights received by the disposal facilities.

Waste Characterization	*Project Waste Category*	*Amount (Tons)*
Class 2 Non-Hazardous	1	69,671
Class 1 Non-RCRA Hazardous	2	60,650
Class 1 RCRA Hazardous (US Ecology)	3, 4, 5, 7	19,387
Class 1 RCRA Hazardous (Arlington)	6 & 8	0

Attachment D6 provides a summary of the stockpile sample results and their determined waste characterizations. Section 1 provides a chart presenting excavated materials transported offsite (in accumulated tons by month).

2.8 RDIP Section 10 – Non-Remedial Activities

In addition to the spur track removal and storm sewer removal activities anticipated and presented in the RDIP, Envirocon also encountered and removed other inactive subsurface utility pipes and buried concrete foundations associated with former railroad activities, former S-W operations, or other historic operations. See Attachment B for Asbuilt Drawings showing areas where piping was encountered and removed.

2.9 RDIP Section 11 – Soil Gas Evaluation

The RDIP text indicates the anticipated schedules for post-remediation activity installation and sampling of soil gas occurring in February/March, and August/September 2012, assuming a completion of remediation activities in November 2011. These dates for soil gas evaluation are now anticipated to occur in June 2012 and November 2012. Soil gas evaluation strategy is further discussed in the project OM&M plan. The soil gas evaluation strategy is consistent with Section 11 of the RDIP, with the following modifications:

- Additional investigation location near the former UST area.
- Additional investigation location downgradient of the former UST area and within the former water treatment plant area.
- Re-location of one sampling location from near slurry wall Breach 3 to upgradient of the breach.

2.10 RDIP Section 13 – Groundwater Monitoring Program

2.10.1 RDIP Section 13.1, Groundwater Monitoring Well Locations

The project OM&M plan includes the groundwater monitoring program for the project after remedy implementation. This groundwater monitoring program is consistent with Section 13 of the RDIP, with the following modifications:

- Slight movement of actual new well installations based on field conditions.

- Installation of additional well, CDM-113, upgradient of current location of slurry wall breach #3 (breach moved east to connect with saturated soil excavation).
- Installation of additional well CDM-114 at RDIP-identified piezometer location, downgradient of the former UST area and upgradient to the existing slurry wall.
- Re-numbering of piezometers based on above change.
- Contingent well not needed on former Rifkin property.
- Modification to sampling frequency of wells RP-1, RP-4, and MW-3 based on groundwater monitoring results during the remedy implementation.
- Addition of existing monitoring well MD-5 at downgradient offsite property for periodic depth to groundwater measurements.
- Change frequency of depth to groundwater measurements to annually for downgradient wells LF-24 and LF-25 on Union Pacific Railroad property.

Wells installed during remedy implementation were installed under permit and reports for the completions were submitted to ACPWA. Copies of these reports are included in Attachment G2. A summary of their construction and surveyed coordinates are also included in Attachment G2. The locations for these newly installed wells and other remaining wells are presented in Attachment B. Site permits are included in Attachment F.

The first post-remedy implementation groundwater monitoring report will be submitted by July 31, 2012 to DTSC and Novartis. It will include data from March 2012, April 2012, May 2012, and June 2012, monthly water levels and sample results from April 2012. April 2012 sampling/analysis conforms to the annual sampling requirements for the project.

2.10.2 RDIP Section 13.2.1, Groundwater Quality Sampling and Analysis during Remedy Implementation

Groundwater sampling and analysis were conducted in accordance with the RDIP. The results were used to assess potential impacts to the former Rifkin property from the potential spreading of upgradient, offsite plumes and, to evaluate any arsenic concentration changes during remedy implementation. The results from the activities are presented in Attachment D4.

2.10.3 RDIP Section 13.2.2, Depth to Groundwater Measurements during Remedy Implementation

Depth to groundwater measurements were conducted in accordance with the RDIP. The results were used to assess potential impacts to the former Rifkin property from the potential spreading of upgradient, offsite plumes and, to evaluate any arsenic concentration changes during remedy implementation. The results from the activities are presented in Attachment D4.

This page intentionally left blank.

Section 3

Photographs of Site Conditions

Representative photographs of the Site before, during, and after remediation activities are presented in Attachment I.

This page intentionally left blank.

Section 4
References

CDM, 2011. Final Remedial Design Implementation Plan, Sherwin-Williams Company, Emeryville, California. Camp Dresser & McKee Inc. June 29, 2011.

CDM, 2010. Final Remedial Action Plan, Sherwin-Williams Company, Emeryville, California. Camp Dresser & McKee Inc. June 14, 2010.

DTSC Envirostor. 2012. Sherwin Williams Site Activities and Reports. Available on-line at: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60000189

DTSC, 2011a. Letter providing approval of the June 29, 2011 Final Remedial Design and Implementation Plan. California Environmental Protection Agency, Department of Toxic Substances Control. June 30, 2011.

DTSC, 2011b. Letter providing conditional approval to proceed with soil excavation after partial review of the Remedial Design and Implementation Report. California Environmental Protection Agency, Department of Toxic Substances Control. June 8, 2011.

DTSC, 2010. Letter providing approval of the June 14, 2010 Final Remedial Action Plan. California Environmental Protection Agency, Department of Toxic Substances Control. June 14, 2010.

DTSC, 2006. Imminent and Substantial Endangerment Determination and Order and Remedial Action Order. Docket No. IS/E 05/06-007. California Environmental Protection Agency, Department of Toxic Substances Control. May 10, 2006.

This page intentionally left blank.

CDM Smith

cdmsmith.com

PLAN

Operations and Maintenance Plan

The Sherwin-Williams Company
1450 Sherwin Avenue
Emeryville, California

Prepared For:

The Sherwin-Williams Company
101 Prospect Avenue NW
Cleveland, OH 44115

Prepared By:

CDM Smith Inc.
100 Pringle Avenue, Suite 300
Walnut Creek, California 94596

December 11, 2012

CDM Smith

Table of Contents

Section 1 Introduction 1-1

Section 2 Site Operations 2-1

Section 3 Site Maintenance and Monitoring 3-1

3.1 Site Maintenance 3-1
3.2 Groundwater Monitoring 3-1
3.3 Soil Ga Evaluaton 3-1
3.4 Reporting 3-2

Section 4 Soil and/or Groundwater Management 4-1

Section 5 References 5-1

Attachments

Attachment A	Drawings
Attachment B	Summary Residual Concentrations of Contaminants of Concern in Vadose Zone Soil
Attachment C	Groundwater Monitoring Program
Attachment D	Soil Gas Evaluation Strategy
Attachment E	Health and Safety Plans

Section 1
Introduction

This Operation and Maintenance (O&M) Plan is for the continued management of remedy implemented and for the residual contaminants of concern (COCs) remaining at The Sherwin-Williams Company (S-W) property located at 1450 Sherwin Avenue in Emeryville, California and a portion of the adjacent former Rifkin property, located at 4525 – 4563 Horton Street, to which hazardous substances have migrated from the S-W property. Collectively the S-W property and this portion of the former Rifkin property are referred to as the "Site" within this document. The Site consists of approximately 10 acres. Novartis Vaccines and Diagnostics, Inc. (Novartis) is the current owner of the former Rifkin property.

An O&M Agreement, containing provisions regarding the activities, notification, submittals, emergency response, and communication procedures, will be entered into by S-W and DTSC to implement this O&M Plan.

The remedy implemented at the Site has been documented in the project's Remedy Implementation Completion Report (Completion Report), dated July 25, 2012 (CDM Smith, 2012). The remedy was implemented in accordance with the California Department of Toxic Substances Control (DTSC) Imminent and Substantial Endangerment Determination and Order and Remedial Action Order No. 05/06-007 (the Order) and the Remedial Action Plan (RAP), dated June 14, 2010, and Remedial Design Implementation Plan (RDIP), dated June 29, 2011, for the Site (DTSC, 2006; CDM 2010; and, CDM, 2011). The RAP, RDIP, and Completion Report were approved by DTSC in letters dated June 14, 2010, June 30, 2011, and August 6, 2012, respectively (DTSC, 2010; DTSC, 2011; and, DTSC, 2012a).

The remedy implementation occurred between March 2011 and April 2012, and consisted of the following key components:

- Installation and operation of an air monitoring system and air sampling program to evaluate the effectiveness of Site controls in maintaining the safety of the surrounding community.
- Installation and operation of a temporary soil vapor extraction and treatment system to remove volatile organics from the most impacted vadose zone excavation area.
- Relocation of a high-pressure natural gas line, from under the western sidewalk of Horton Street (i.e., adjacent to the excavation) to the other side of the street.
- Excavation and offsite disposal of vadose zone soil containing arsenic, lead, and/or organic contaminants to support future potential residential use of the Site.
- Removal and offsite disposal of aboveground and underground structures, pipes, and debris containing arsenic, lead, and/or organic contaminants, primarily consisting of the raised cap and former water treatment plant.
- Excavation dewatering, and onsite pre-treatment and discharge to sanitary sewer of extracted water.

- Excavation and offsite disposal of saturated zone soil containing arsenic, lead, and/or organic contaminants to support long-term protection of groundwater.
- Backfill of excavation areas to control groundwater movement within the Site.
- Placement of backfill and gravel cover to re-grade the Site to facilitate storm water drainage.
- Extension of the existing slurry wall along the southwestern portion of the Site.
- Installation of a membrane barrier and interceptor trench to prevent movement of groundwater from the S-W property to the former Rifkin property.
- Removal of portions of the existing slurry wall to control groundwater movement from the Site to offsite, downgradient (western) areas.
- Abandonment of a former underground storage tank (UST) at the Site.
- Abandonment of selected existing groundwater wells no longer required for the project.
- Installation of new groundwater wells required for the post-remedy implementation groundwater monitoring program.
- Development and recording of a Covenant and Agreement by DTSC with Alameda County Clerk-Recorder's Office to protect present or future human health or safety or the environment (Covenant) through identifying specific restrictions and requirements associated with the residual COCs at the S-W property and for maintaining and preserving the integrity of the remedy, as presented in the RAP, RDIP, Completion Report, and this O&M Plan.

The remedy implementation has achieved the project remedial action objectives (RAOs). The following presents the RAOs that were established for the Site in the RAP and remedy component that fulfills the RAO:

Remedial Action Objective (RAO)	*Remedy Component*
▪ Minimize direct contact/ingestion by humans with Site soil containing contaminants of concern (COCs) at concentrations exceeding the cleanup goals.	▪ Removal of vadose zone soil with COC concentrations above cleanup goals. ▪ Development and recording of the Covenant and Agreement to restrict the use of the S-W property (Covenant). ▪ Monitor for possible contamination in areas outside existing removal areas, as identified in this Operation and Maintenance (O&M) Plan and/or subsequent DTSC-approved modifications. ▪ Monitor soil gas conditions, as identified in this O&M Plan and/or subsequent DTSC-approved modifications.
▪ Minimize migration of and/or inhalation of airborne dust by humans from the Site containing COCs at concentrations exceeding the cleanup goals.	▪ Removal of vadose zone soil with COC concentrations above cleanup goals. ▪ Development and recording of the Covenant, controlling intrusive activity at the S-W property.

Remedial Action Objective (RAO)	*Remedy Component*
▪ Minimize exposure to and inhalation by humans of volatile organic COCs at concentrations in indoor air exceeding the cleanup goals.	▪ Removal of vadose zone soil with COC concentrations above cleanup goals. ▪ Development and recording of the Covenant for the S-W property. ▪ Monitor for possible contamination in areas outside existing removal areas, as identified in this O&M Plan and/or subsequent DTSC-approved modifications. ▪ Monitor soil gas conditions, as identified in this O&M Plan and/or subsequent DTSC-approved modifications.
▪ Minimize risk to down-gradient ecological receptors from offsite groundwater migration containing COCs at concentrations exceeding the cleanup goals.	▪ Removal of saturated zone soil with COC concentrations identified as source material. ▪ Backfill to control groundwater movement. ▪ Installation of slurry wall breaches and extension and maintain key portions of existing slurry wall to control groundwater movement. ▪ Grading of the Site to minimize storm water infiltration and prevent ponding. ▪ Monitor groundwater conditions, as identified in this O&M Plan and/or subsequent DTSC-approved modifications.
▪ Minimize onsite human contact with groundwater containing COCs at concentrations exceeding the cleanup goals.	▪ Removal of saturated zone soil with COC concentrations identified as source material. ▪ Development and recording of the Covenant.

Vadose zone soils with COCs above cleanup goals have been removed. Confirmation samples were collected from the vadose zone excavation sidewalls to demonstrate conformance with the cleanup goals as established in the RAP.

The RAOs were met through the implementation of the remedy. The remedy components that remain and require protection in order to maintain and preserve the integrity of the remedy are:

- Portions of Existing Slurry Wall to control groundwater movement
- Slurry Wall Extension to control groundwater movement
- Slurry Wall Breaches to control groundwater movement
- Interceptor Trench to control groundwater movement
- Membrane Barrier to control groundwater movement
- Selective Placement of Low- and High-Permeability Backfill to control groundwater movement

- Grading of the Site to minimize storm water infiltration and prevent ponding
- Groundwater Monitoring Wells to monitor groundwater conditions and evaluate remedy effectiveness

The locations of these components are presented in Attachment A, Drawing 1. All components are located below grade and not visible at the Site surface, except the groundwater monitoring wells, soil gas monitoring points and the Site grading. The tops of groundwater monitoring wells and soil gas monitoring points are visible at the Site surface.

Attachment A, Drawing 4 presents vadose zone confirmation soil sample locations. Attachment B presents the range of COCs in vadose zone samples identified at the Site and their respective cleanup goals. No remaining sample has a COC concentration above its respective cleanup goal.

Groundwater within the Site is expected to continue having COC concentrations above cleanup goals. Groundwater will be monitored, as identified in this O&M Plan and/or subsequent DTSC-approved modifications. Periodic groundwater monitoring reports will be prepared and submitted to DTSC (see Section 3.4.1 for reporting).

Soil gas within the Site will be monitored, as identified in this O&M Plan and/or subsequent DTSC-approved modifications. Periodic soil gas monitoring reports will be prepared and submitted to DTSC (see Section 3.4.1 for reporting).

The following presents the COCs identified for the S-W property and, their cleanup goals by media.

Contaminant of Concern	*DTSC-Approved Cleanup Goals*				
	Vadose Zone Soil (mg/kg)		*Soil Gas (ug/m3)*		
	Commercial Worker	*Unrestricted Resident*	*Commercial Worker*	*Unrestricted Resident*	*Groundwater (mg/L)*
Volatile Organic Compounds					
Acetone	1,800,000	70,000	NA	NA	1.5
Benzene	0.076	0.015	122	36.2	0.0010
2-Butanone	NA	NA	NA	NA	4.2
1,2-Dichloroethane	NA	NA	NA	NA	0.00050
1,2-Dichloropropane	NA	NA	NA	NA	0.0050
4-Chloroaniline	8,200	310	NA	NA	NA
Ethylbenzene	200,000	7,800	1,400	420	0.30
Methyl Isobutyl Ketone	NA	NA	NA	NA	0.12
Methyl Tert Butyl Ether	NA	NA	NA	NA	0.013
Tetrachloroethene	0.32	0.063	NA	NA	NA
Toluene	440	100	NA	NA	0.15
Trichloroethene	NA	NA	NA	NA	0.0050
1,2,3-Trichloropropane	NA	NA	NA	NA	0.0050
1,3,5-Trimethylbenzene	NA	NA	NA	NA	0.46
1,2,4-Trimethylbenzene	NA	NA	NA	NA	0.14
Vinyl Chloride	NA	NA	NA	NA	0.00050

Contaminant of Concern	DTSC-Approved Cleanup Goals				
	Vadose Zone Soil (mg/kg)		Soil Gas (ug/m3)		
	Commercial Worker	Unrestricted Resident	Commercial Worker	Unrestricted Resident	Groundwater (mg/L)
Xylenes	11,000	2,300	NA	NA	0.020
Semivolatile Organic Compounds					
Benzo(a)anthracene	9.5	1.1	NA	NA	NA
Benzo(b)fluoranthene	9.5	1.1	NA	NA	NA
Benzo(b,k)fluoranthene	9.5	1.1	NA	NA	NA
Naphthalene	41,000	1,300	NA	NA	0.017
Phenanthrene	160,000	4,500	NA	NA	NA
Inorganic Compounds					
Antimony	820	31	NA	NA	
Arsenic	24	24	NA	NA	0.036
Barium	140,000	5,500	NA	NA	NA
Cadmium	15	3.1	NA	NA	NA
Chromium (+3)	3,100,000	120,000	NA	NA	NA
Chromium (+6)	41,000	1,600	NA	NA	NA
Iron	NA	NA	NA	NA	0.30
Lead	5,600	250	NA	NA	NA
Manganese	NA	NA	NA	NA	0.050
Selenium	10,000	390	NA	NA	NA
Zinc	610,000	23,000	NA	NA	0.081

Notes:
mg/kg – milligrams per kilogram
ug/m3 – microgram per cubic meter
mg/L – milligram per liter
NA - not applicable; contaminant is not of concern in this media

The cleanup goals for the contaminants of concerns were established in the Remedial Action Plan (RAP) and approved by the DTSC. For vadose zone soil, cleanup goals are compared to the 95% upper confidence limits of the averages of the detections (95 UCL) from Site samples to demonstrate conformance with the cleanup goals. For soil gas and groundwater, cleanup goals are compared to detections in samples from Site monitoring points. With DTSC's approval of the Remedy Implementation Completion Report, DTSC confirmed that the vadose zone soil cleanup goals at the Site have been met.

Section 2
Site Operations

The operations of the remedy components that remain at the Site are passive and predominately underground. These remedy components are listed in Section 1 of this O&M Plan. By passive, it is meant that the components are static and do not require any power. However, they must remain whole in order to continue operating as designed. Future construction, development, and/or operations at the Site cannot constrain the objectives of each component without first evaluating its effects and obtaining DTSC approval prior to any modifications to the components, as provided in the Covenant.

The current Site conditions and operations require the placement of a Covenant on the S-W property to protect present or future human health or safety or the environment, and identify specific restrictions and requirements associated with the residual COCs at the S-W property and for maintaining and preserving the integrity of the remedy.

An assessment will be conducted annually to assure that Site construction/operations are not impacting the effectiveness of the remedy components. This assessment shall be made by every April and a report will be submitted to DTSC (see Section 3.4.1 for assessment reporting).

Section 3

Site Maintenance and Monitoring

3.1 Site Maintenance

The remedy components as described in Section 1.0 are passive and require no regular maintenance, except for the groundwater well and soil gas monitoring points. However, they must remain whole in order to continue operating as designed. Future construction, development, and/or operations at the Site cannot constrain the objectives of each component without first evaluating its effects and obtaining DTSC approval prior to any modifications to the components, as provided in the Covenant.

Monitoring Network Inspection and Maintenance

At the time of water level measurement, groundwater sampling, and/or soil gas sampling, the condition of each monitoring point will be documented in a field book, or an equivalent document. Condition items may be identified through visual inspection of the monitoring point, changes in monitoring point performance from those observed during previous monitoring events, and/or unexplained changes in field parameter measurements. Deficiencies or problems identified for a given monitoring point will be addressed within an appropriate timeframe.

Routine maintenance items (i.e., items that require minimal effort) will be addressed in a timely manner. Examples of routine items include darkening the datum mark for a monitoring point, replacement of bolts or seals, and lock replacement. Non-routine maintenance items typically require more extensive effort. Examples of non-routine items include repair of concrete pads surrounding the monitoring point, grading, and cracked casings; and for groundwater monitoring wells possible redevelopment. Items requiring more extensive effort, and that are not addressed in this O&M Plan, will be evaluated on an individual monitoring point basis and may require preparation of a work plan for DTSC review and approval.

In addition to the monitoring point inspection, the total depth of conventional monitoring points without dedicated equipment will be measured at least triennially. Total depth of conventional monitoring points with dedicated equipment will be measured if the equipment is removed from the casing or if there is an indication of a problem with the point. Total depth measurements will be documented in the field log book, or equivalent field document. The total depth will be compared against the depth listed in Appendix B and Appendix D, and previous total depth measurements. If significant sediment accumulation is observed, the point may warrant redevelopment.

3.2 Groundwater Monitoring

Attachment A, Drawing 2 presents the project groundwater well locations. Attachment C presents the groundwater monitoring program.

As needed, the program will be revised based on the Site conditions after DTSC approval.

3.3 Soil Gas Evaluation

Attachment A, Drawing 3 presents the project soil gas monitoring point locations. Attachment D presents the soil gas evaluation strategy.

After completion of the remedy implementation activities, soil gas monitoring wells were installed to collect and analyze soil gas samples. Soil gas samples have been collected in June 2012 and their results presented in Attachment D. The next scheduled soil gas monitoring event is in December 2012. After the December 2012 event, the June and December 2012 results will be evaluated and a report submitted to DTSC. After evaluation of the soil gas conditions, DTSC and Sherwin-Williams will determine whether additional action is needed.

3.4 Reporting

The following presents anticipated post-remedy implementation reporting for the Site through the first Five-Year Review in 2016.

3.4.1 Groundwater

The first post-remedy implementation groundwater monitoring report was submitted to DTSC on July 30, 2012, for the reporting period of March 1, 2012 through June 30, 2102 (ARCADIS, 2012). DTSC approved this report on September 25, 2012 (DTSC, 2012b). Subsequent reports will be provided to DTSC per the following schedule and annually thereafter unless modified through DTSC approval letter:

Groundwater Reporting Period	Submittal of Report to DTSC
July 1, 2012 through December 31, 2012	January 31, 2013
January 1, 2013 through June 30, 2013	July 31, 2013
July 1, 2013 through December 31, 2013	January 31, 2014
January 1, 2014 through June 30, 2014	July 31, 2014
July 1, 2014 through June 30, 2015	July 31, 2015
July 1, 2015 through June, 2016	July 31, 2016

The groundwater monitoring reports will include all information collected from assessment and monitoring events during the previous period. As needed, submittals may be made more frequently on individual topics to maintain the protection of the remedy and/or if the effectiveness of the remedy is in question. The reports will contain summaries of the monitoring program, groundwater elevation data, groundwater quality data, sampling methods utilized, and quality control and quality assurance data. The reports will include figures presenting interpreted groundwater movement and spatial representation of the dissolved arsenic in groundwater sample data. As appropriate with the collection of sufficient data over time, the reports will assess the effectiveness of the remedy.

3.4.2 Soil Gas

Following the collection and analysis of soil gas samples from the December 2012 event, a data summary and evaluation report will be submitted to DTSC. The report will be submitted by the later of January 31, 2013 or within six weeks after receipt of all analytical reports from the laboratory. The report will contain summaries of the monitoring program, deviations, if any, from the strategy and/or methodology presented in this O&M Plan, and soil gas sample results. The report will evaluate if the results are above cleanup goals and, if needed, present recommendations for continued soil gas evaluation.

3.4.3 Five-Year Review

The first Five-Year Review for the remedial action will be conducted for the period from remedy implementation through December 31, 2015. The purpose of the review is to determine if human health and the environment are being protected by the remedial action.

A draft work plan for the Five-Year Review will be submitted to DTSC by September 1, 2015 so that a final work plan can be completed and approved by DTSC by December 31, 2015. The work plan will present

- an outline for the Five-Year Review report,
- information on Site background
- information on Site construction, development, changes, and/or planned future use,
- a summary of the data and information gathered and documents/records completed since remedy implementation,
- a summary of additional remedial actions implemented, if any,
- deviations from the O&M Plan, if any, and
- a preliminary discussion of remedy effectiveness/protectiveness, including the remedy components, controls, and Covenant restrictions and requirements.

A draft Five-Year Review report will be submitted to DTSC by the later of (1) February 28, 2016 or (2) 45 days following DTSC approval of the work plan. The draft report will include a protectiveness statement, provide recommendations for continued evaluation, propose follow-up actions (if any), and outline future reporting requirements. It is anticipated the final report will be completed and approved by DTSC by June 30, 2016.

Section 4

Soil and/or Groundwater Management

Prior to intrusive activities at the Site, the following regulatory agencies must be notified and/or consulted:

- DTSC
- Bay Area Air Quality Management District (BAAQMD), depending on the scope of the proposed activities.

During such intrusive activities (i.e., drilling, well sampling, re-development of the Site properties, etc.) soil and/or groundwater potentially containing residual COCs may be encountered. In addition, the activities may have the potential to affect infiltration rate of storm water to underlying groundwater.

After notification/consultation with the above regulatory agencies, a soil and/or groundwater management plan may be required prior to implementing any activities, as provided in the Covenant. The plan could include, but not be limited to, the following elements:

- Dust and vapor controls,
- Storm water controls,
- Excavated soil stockpile management,
- Stockpile soil sampling procedures,
- Soil and/or groundwater disposal procedures, and
- Groundwater dewatering, treatment, and/or discharge.

Health and Safety

Attachment E presents health and safety plans (HASPs) for workers conducting activities presented in this O&M Plan, excluding management of potentially impacted soils during implementation of future activities. Those implementing such future activity will be responsible for preparing a specific HASP in accordance with Occupational Health and Safety Administration (OSHA) 29 CFR 1910.120 guidelines and Title 8 CCR Section 5192.

Section 5
References

API, 2003. Groundwater Remediation Strategies Tool, Regulatory Analysis & Scientific Affairs Department, Publication Number 4730. December 2003.

ARCADIS, 2012. Data Summary Report for Groundwater Monitoring Activities for the Period from March 1, 2012 through June 30, 2012. ARCADIS U.S., Inc. July 30, 2012.

CDM, 2011. Final Remedial Design Implementation Plan, Sherwin-Williams Company, Emeryville, California. Camp Dresser & McKee Inc. June 29, 2011.

CDM, 2010. Final Remedial Action Plan, Sherwin-Williams Company, Emeryville, California. Camp Dresser & McKee Inc. June 14, 2010.

CDM, 2009. Feasibility Study, Sherwin-Williams Company, Emeryville, California. Camp Dresser & McKee Inc. April 1, 2009.

CDM Smith, 2012. Remedy Implementation Completion Report, Sherwin-Williams Company, Emeryville, California. CDM Smith Inc. July 25, 2012.

DTSC, 2012a. Letter providing approval of the July 27, 2012 Remedy Implementation Completion Report. California Environmental Protection Agency, Department of Toxic Substances Control. August 6, 2012.

DTSC, 2012b. Letter providing approval of the July 30, 2012 Data Summary Report for Groundwater Monitoring Activities for the Period from March 1, 2012 through June 30, 2012. California Environmental Protection Agency, Department of Toxic Substances Control. September 25, 2012.

DTSC, 2011. Letter providing approval of the June 29, 2011 Final Remedial Design and Implementation Plan. California Environmental Protection Agency, Department of Toxic Substances Control. June 30, 2011.

DTSC, 2010. Letter providing approval of the June 14, 2010 Final Remedial Action Plan. California Environmental Protection Agency, Department of Toxic Substances Control. June 14, 2010.

DTSC, 2006. Imminent and Substantial Endangerment Determination and Order and Remedial Action Order. Docket No. IS/E 05/06-007. California Environmental Protection Agency, Department of Toxic Substances Control. May 10, 2006.

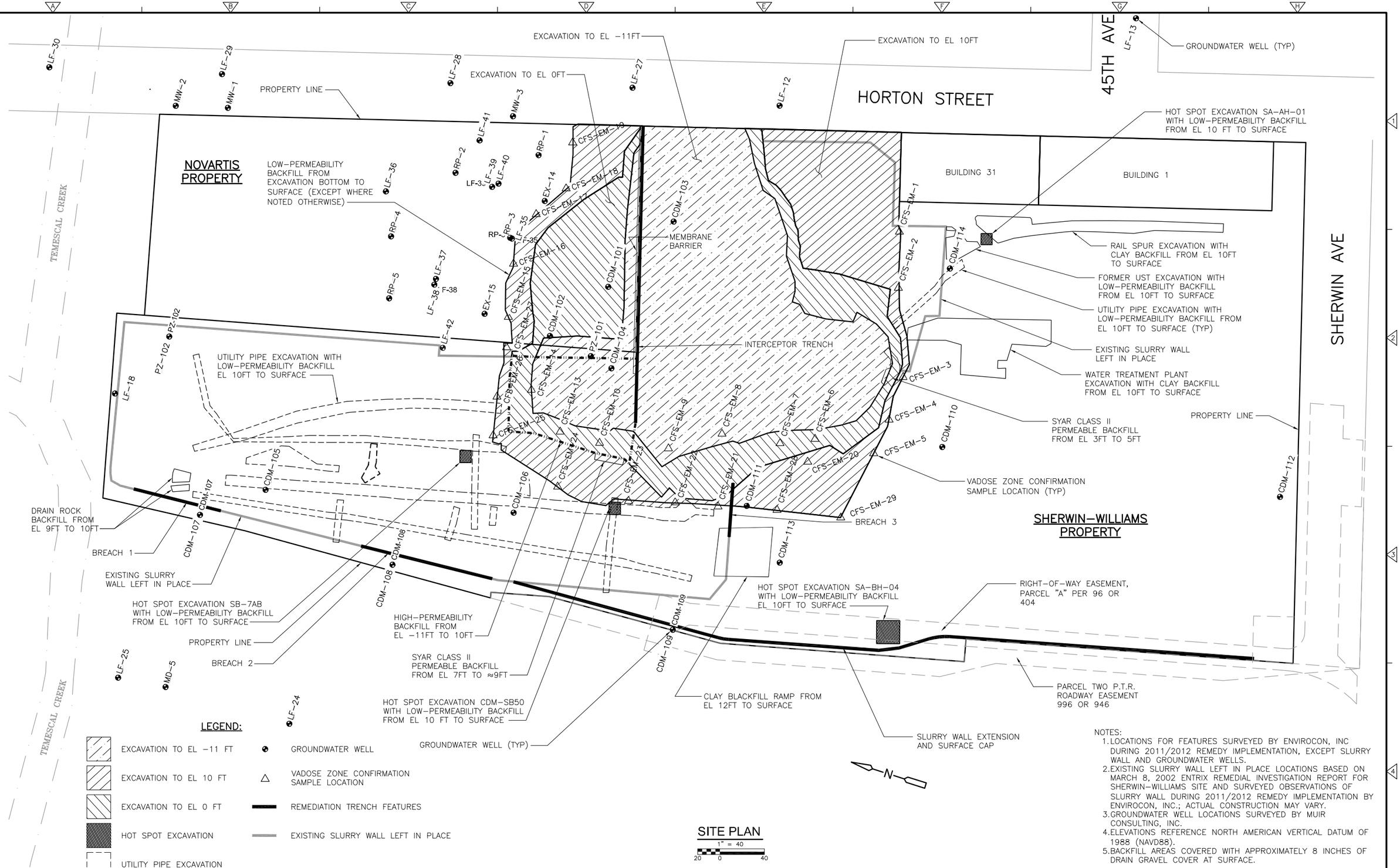
LFR, 2011. Combined Groundwater and NPDES Self-Monitoring Report, Sherwin-Williams Facility, 1450 Sherwin Avenue, Emeryville, California. LFR Inc. April 29, 2011.

LFR, 2006a. Groundwater Monitoring Plan Assessment, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. LFR Inc. June 28, 2006.

LFR, 2006b. Quality Assurance Project Plan, Sherwin-Williams Facility, 1450 Sherwin Avenue, Emeryville, California. LFR Inc. July 13, 2006.

Attachment A

Drawings



SITE PLAN

1" = 40

20 0 40

NOTES:

1. LOCATIONS FOR FEATURES SURVEYED BY ENVIROCON, INC DURING 2011/2012 REMEDY IMPLEMENTATION, EXCEPT SLURRY WALL AND GROUNDWATER WELLS.
2. EXISTING SLURRY WALL LEFT IN PLACE LOCATIONS BASED ON MARCH 8, 2002 ENTRIX REMEDIAL INVESTIGATION REPORT FOR SHERWIN−WILLIAMS SITE AND SURVEYED OBSERVATIONS OF SLURRY WALL DURING 2011/2012 REMEDY IMPLEMENTATION BY ENVIROCON, INC.; ACTUAL CONSTRUCTION MAY VARY.
3. GROUNDWATER WELL LOCATIONS SURVEYED BY MUIR CONSULTING, INC.
4. ELEVATIONS REFERENCE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
5. BACKFILL AREAS COVERED WITH APPROXIMATELY 8 INCHES OF DRAIN GRAVEL COVER AT SURFACE.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: X
DRAWN BY: X
SHEET CHK'D BY: X
CROSS CHK'D BY: X
APPROVED BY:
DATE: MAY 2012

CDM Smith
100 Pringle Avenue, Suite 300
Walnut Creek, CA 94596
Tel: (925) 933-2900

VERIFY SCALE

THIS BAR IS ONE INCH LONG AT FULL SCALE

SHERWIN-WILLIAMS COMPANY

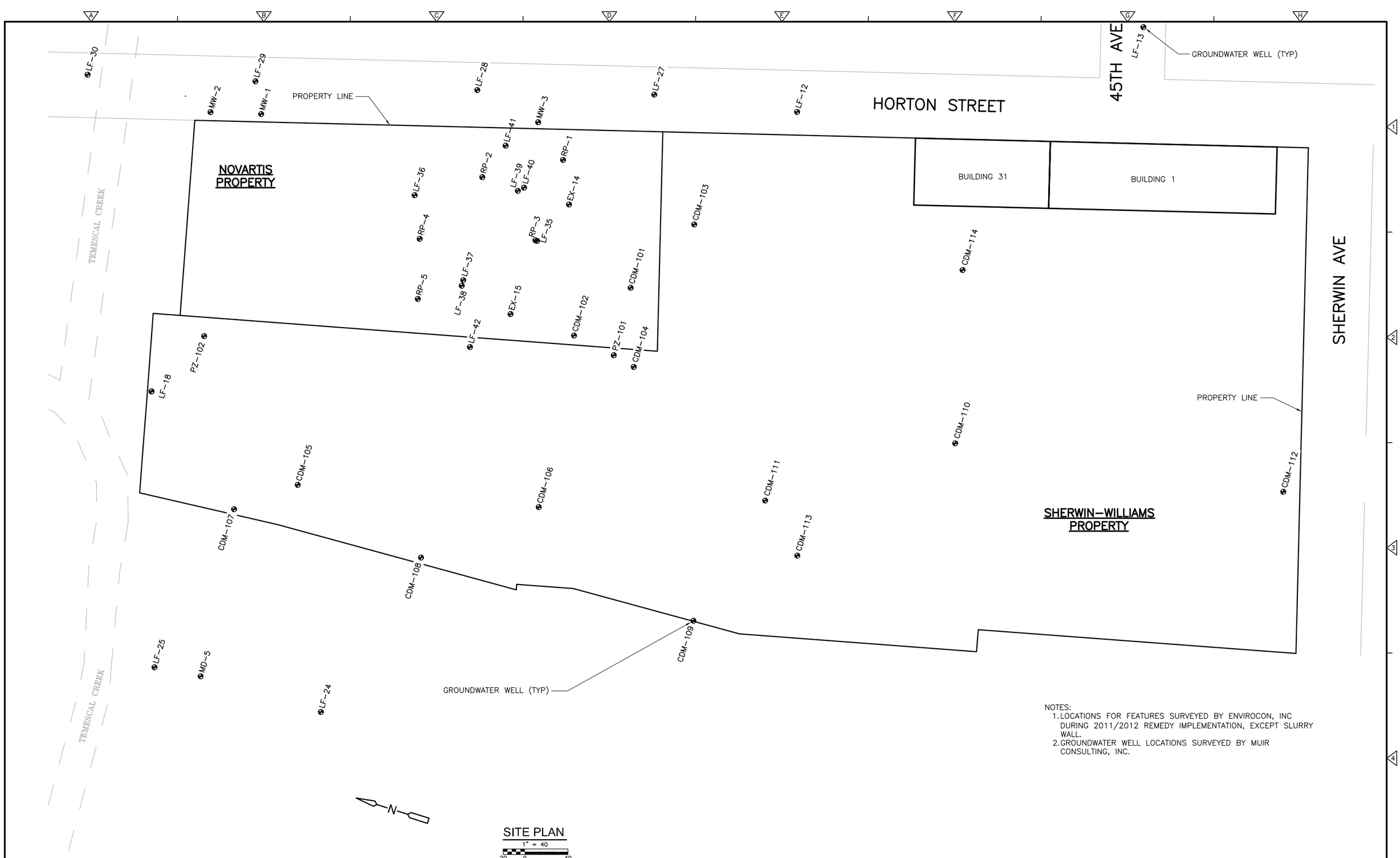
SITE REMEDIATION
EMERYVILLE, CALIFORNIA

ASBUILT SITE PLAN

PROJECT NO. 13452−81494
FILE NAME: sw as−built.dwg
SHEET NO. 1

P:\13452 Sherwin−Williams\81494 Emeryville\Completion Report\CAD\ sw as−built 06/27/12 16:33 talbotwk XREFS: CDM_2234, swexutil, swextopo, swexbndy, XR−SLRY−WALL, WELLS, (2011−04−14)SW topo, sh01 Edited topo, ACAD−WELLS, Aerialtoposh01
© CDM SMITH ALL RIGHTS RESERVED.
REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM SMITH AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.

© CDM SMITH ALL RIGHTS RESERVED.
REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM SMITH AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.



SITE PLAN
1" = 40
20 0 40

NOTES:
1. LOCATIONS FOR FEATURES SURVEYED BY ENVIROCON, INC DURING 2011/2012 REMEDY IMPLEMENTATION, EXCEPT SLURRY WALL.
2. GROUNDWATER WELL LOCATIONS SURVEYED BY MUIR CONSULTING, INC.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: x
DRAWN BY: x
SHEET CHK'D BY: x
CROSS CHK'D BY: x
APPROVED BY:
DATE: MAY 2012

CDM Smith
100 Pringle Avenue, Suite 300
Walnut Creek, CA 94596
Tel: (925) 933-2900

VERIFY SCALE
THIS BAR IS ONE INCH LONG AT FULL SCALE

SHERWIN-WILLIAMS COMPANY

SITE REMEDIATION
EMERYVILLE, CALIFORNIA

GROUNDWATER WELL LOCATIONS

PROJECT NO. 13452–81494
FILE NAME: sw as–built2.dwg

SHEET NO.
2

P:\13452 Sherwin-Williams\81494 Emeryville\Completion Report\CAD\ figure 3 08/20/12 12:47 talbotwk XREFS: CDM_2234, swexutil, swextopo, swexbndy, XR-SLRY-WALL, WELLS, (2011-04-14)SW topo, sh01 Edited topo, ACAD-WELLS, Aerialtoposh01
© CDM SMITH ALL RIGHTS RESERVED.
REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM SMITH AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.

HORTON STREET

45TH AVE

SHERWIN AVE

PROPERTY LINE

TEMESCAL CREEK

NOVARTIS PROPERTY

LOW-PERMEABILITY BACKFILL FROM EXCAVATION BOTTOM TO SURFACE (EXCEPT WHERE NOTED OTHERWISE)

BUILDING 31

BUILDING 1

SGMP-12

SGMP-10

SGMP-4

SGMP-9

SOIL GAS MONITORING POINT (TYP)

SGMP-1

EXISTING SLURRY WALL LEFT IN PLACE

SGMP-11

SGMP-2

SGMP-6

SGMP-5

SGMP-8

SGMP-7

SGMP-3

BREACH 1

BREACH 3

EXISTING SLURRY WALL LEFT IN PLACE

PROPERTY LINE

HIGH-PERMEABILITY BACKFILL FROM EL -11FT TO 10FT

BREACH 2

SHERWIN-WILLIAMS PROPERTY

N

SITE PLAN

1" = 40

20 0 40

NOTES:

1. LOCATIONS FOR FEATURES SURVEYED BY ENVIROCON, INC DURING 2011/2012 REMEDY IMPLEMENTATION, EXCEPT SLURRY WALL.
2. EXISTING SLURRY WALL LEFT IN PLACE LOCATIONS BASED ON MARCH 8, 2002 ENTRIX REMEDIAL INVESTIGATION REPORT FOR SHERWIN-WILLIAMS SITE AND SURVEYED OBSERVATIONS OF SLURRY WALL DURING 2011/2012 REMEDY IMPLEMENTATION BY ENVIROCON, INC.; ACTUAL CONSTRUCTION MAY VARY.
3. ELEVATIONS REFERENCE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4. BACKFILL AREAS COVERED WITH APPROXIMATELY 8 INCHES OF DRAIN GRAVEL COVER AT SURFACE.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: x
DRAWN BY: x
SHEET CHK'D BY: x
CROSS CHK'D BY: x
APPROVED BY:
DATE: MAY 2012

CDM Smith
100 Pringle Avenue, Suite 300
Walnut Creek, CA 94596
Tel: (925) 933-2900

VERIFY SCALE

THIS BAR IS ONE INCH LONG AT FULL SCALE

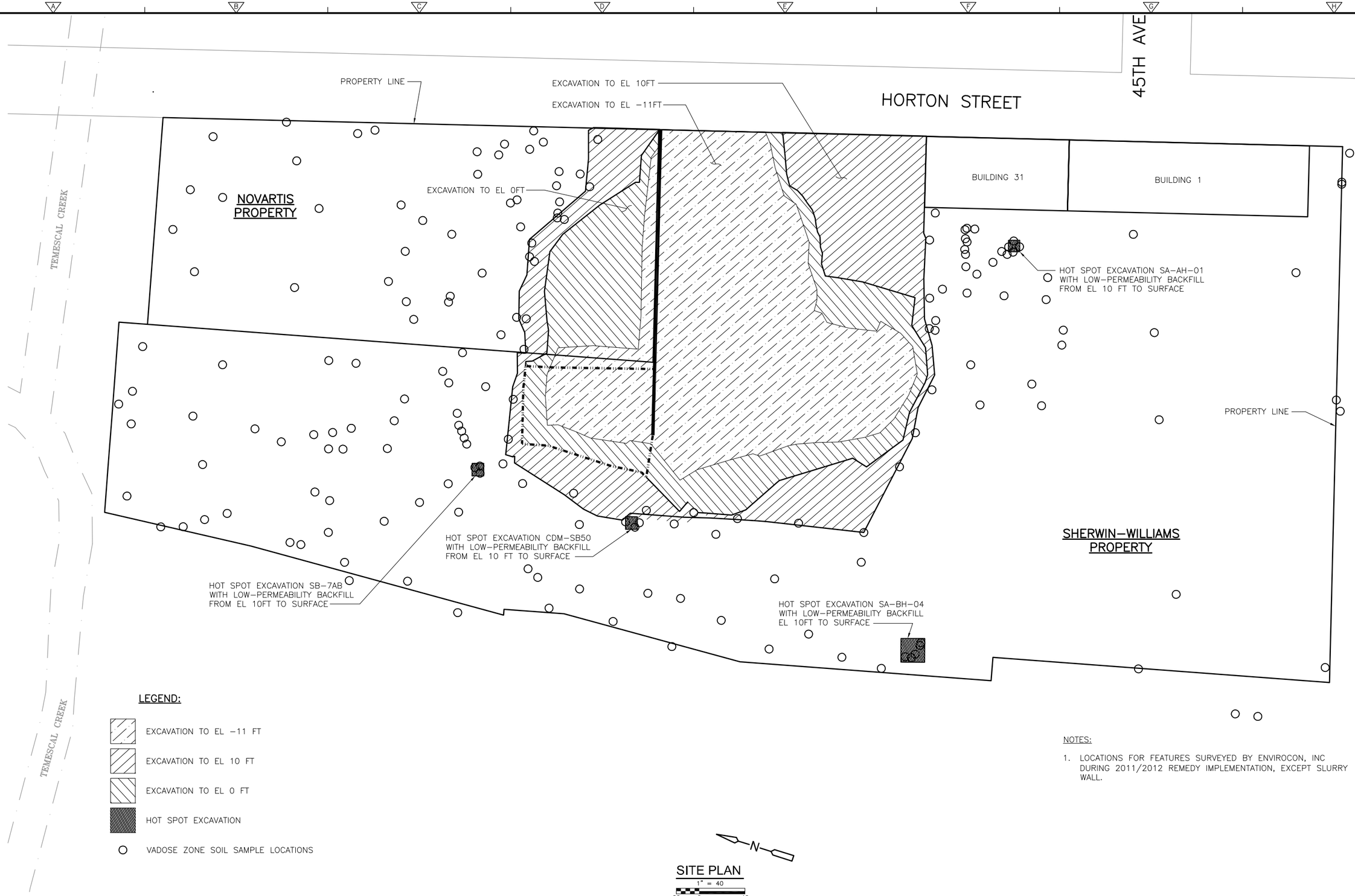
SHERWIN-WILLIAMS COMPANY

SITE REMEDIATION
EMERYVILLE, CALIFORNIA

SOIL GAS MONITORING POINTS

PROJECT NO. 13452-81494
FILE NAME: sw as-built1a.dwg

SHEET NO.
3



NOTES:

1. LOCATIONS FOR FEATURES SURVEYED BY ENVIROCON, INC DURING 2011/2012 REMEDY IMPLEMENTATION, EXCEPT SLURRY WALL.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: x
DRAWN BY: x
SHEET CHK'D BY: x
CROSS CHK'D BY: x
APPROVED BY:
DATE: MAY 2012

CDM Smith
100 Pringle Avenue, Suite 300
Walnut Creek, CA 94596
Tel: (925) 933-2900

VERIFY SCALE
THIS BAR IS ONE INCH LONG AT FULL SCALE

SHERWIN-WILLIAMS COMPANY

SITE REMEDIATION
EMERYVILLE, CALIFORNIA

VADOSE ZONE SOIL SAMPLE LOCATIONS

PROJECT NO. 13452-81494
FILE NAME: FIGURE 4

SHEET NO.
4

P:\13452 Sherwin-Williams\81494 Emeryville\Completion Report\CAD\ FIGURE 4 08/21/12 11:16 talbotwk XREFs: CDM_2234, swexutil, swextopo, swexbndy, XR-SLRY-WALL, WELLS, (2011-04-14)SW topo, ACAD-WELLS, Aerialtoposh01
© CDM SMITH ALL RIGHTS RESERVED.
REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM SMITH AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.

Attachment B

Summary Residual Concentrations of Chemicals of Concern in Vadose Zone Soil

Attachment B
Summary of Chemicals of Concern in Vadose Zone Soil
Sherwin-Williams Emeryville Operation and Maintenance Plan

Chemical of Concern in RAP	*DTSC-Approved Cleanup Goal (mg/kg)*		*Samples Analyzed*	*Detections*	*Minimum Detection (mg/kg)*	*Maximum Detection (mg/kg)*	*95UCL (mg/kg)*
	Commercial Worker	*Unrestricted Resident*					
Volatile Organic Compounds							
Acetone	1800000	70000	69	20	ND	0.28	--
Benzene	0.076	0.015	69	1	ND	0.010	--
4-Chloroaniline	8200	310	69	1	ND	0.200	--
Ethylbenzene	200000	7800	89	27	ND	520	--
Tetrachloroethene	0.32	0.063	69	0	ND	ND	--
Toluene	440	100	87	24	ND	14	--
Xylenes	11000	2300	58	27	ND	1600	--
Semivolatile Organic Compounds							
Benzo(a)anthracene	9.5	1.1	68	0	ND	0	--
Benzo(b)fluoranthene	9.5	1.1	39	3	ND	0.96	--
Benzo(b,k)fluoranthene	9.5	1.1	39	2	ND	0.68	--
Naphthalene	41000	1300	81	21	ND	10	--
Phenanthrene	160000	4500	68	2	ND	1.7	--
Inorganic Compounds							
Antimony	820	31	41	2	ND	6.4	--
Arsenic	24	24	128	128	2.0	64	12
Barium	140000	5500	48	48	29	390	--
Cadmium	15	3.1	54	22	ND	7.2	2.1
Chromium (+3)	3100000	120000	48	48	9.6	61	--
Chromium (+6)	41000	1600					
Lead	5600	250	76	76	3.8	490	55
Selenium	10000	390	45	35	ND	1.6	--
Zinc	610000	23000	84	84	29	4070	--

Notes:

mg/kg - milligram per kilogram

ND - not detected

The cleanup goals for the chemicals of concerns, except arsenic, are site-specific risk-based threshold levels presented in the Remedial Action Plan (RAP).

The cleanup goal for arsenic in soil is its naturally occurring background concentration, as presented in RAP.

Site analyses were for total chromium (sum of +3 and +6 species); maximum total chromium detection is less than both chromium cleanup goals.

For chemicals of concern with maximum detections above their respective cleanup goals, the 95% upper confidence limits of the averages of the detections (95 UCL) are presented to demonstrate conformance with the cleanup goals; "--" is presented where this analysis is not warranted. This approach is consistent with the cleanup goals presented in the RAP.

Attachment C

Groundwater Monitoring Program

Attachment C

Groundwater Monitoring Program

The Groundwater Monitoring Program outlines provisions for a long term groundwater monitoring program to collect data to evaluate the effectiveness of the soil excavation, backfill, and slurry wall breaches/extension. The effectiveness of the final remedy will be evaluated based on its ability: (1) to promote natural attenuation of residual chemicals of concern (COCs) in groundwater, primarily arsenic; (2) to achieve Site cleanup goals within a reasonable timeframe; and (3) to control groundwater movement through the Site without producing long-term groundwater mounding.

The groundwater monitoring program consists of:

- Designation of a well network;
- Collection and evaluation of depths to groundwater and concentrations of COCs in groundwater in the well network;
- Development of criteria and methodologies to evaluate data that are collected; and
- Development of contingency actions with a decision framework for their initiation.

Statistical analysis will be used to evaluate trends in the concentration data. The depth to groundwater, and COC concentrations and concentration trends will be evaluated to determine if contingency action(s) are needed to achieve Site cleanup goals (see Section 1 of this Operation and Maintenance (O&M) Plan).

Based on the timing and nature of future redevelopment and future construction activities, and/or results from the groundwater monitoring program, it may be necessary to modify the groundwater monitoring network or monitoring requirements at some point in the future. As such, at any time after implementation of the remedy, The Sherwin-Williams Company (S-W) may request modifications to the groundwater monitoring program presented in this document. S-W will implement the changes to the groundwater monitoring program only after approval by the California Department of Toxic Substances Control (DTSC).

C.1 Groundwater Monitoring Well Locations

Attachment A, Drawing 2 of this Operation and Maintenance (O&M) Plan presents the locations of these monitoring wells and piezometers. Table C-1 provides a summary of construction details and a summary of the monitoring program after remedy implementation.

C.2 Monitoring Frequency and Sample Analysis

This section presents the monitoring and analysis programs 1) during remedy implementation and 2) for the first four years after remedy implementation.

C.2.1 Groundwater Quality Sampling and Analysis

Site groundwater monitoring program for the first four years after remedy implementation will be in accordance with Table C-1, and/or subsequent DTSC-approved modifications.

With the exception of wells CDM-112, CDM-113, and CDM-114, which will be sampled annually, S-W will sample all new monitoring wells installed on the S-W property on a semi-annual basis for the first two years after remedy implementation. Following these two years, S-W will use the data from the well samples and the data quality objectives to determine if semi-annual sampling should continue or whether the frequency can be reduced to annual.

Rifkin Guard Well RP-1 and RP4, and well MW-3, will be sampled for arsenic analysis on a quarterly basis as the arsenic concentrations at these wells during remedy implementation increased above their respective historical maximum detections. Quarterly sampling for each of these three wells will continue until statistical analysis of the results demonstrates that the arsenic concentration for each respective well is stable or decreasing; the frequency of sampling for the well will then be adjusted to semi-annual.

S-W will collect groundwater samples in accordance with the methodology for well sampling presented in the existing project Groundwater Monitoring Plan Assessment (LFR, 2006a) and Quality Assurance Project Plan (LFR, 2006b). The samples will be sent to a certified laboratory chosen by S-W and analyzed for arsenic by EPA Method 6010B, volatile organic compounds (VOCs) by EPA Method 8260B, and/or total petroleum hydrocarbons (TPH) as gasoline (TPH-G) by EPA Method 8260 and TPH as diesel and motor oil (TPH-D/MO) by EPA Method 8015M with silica gel cleanup (SGC). In addition, S-W will measure the following field parameters during purging and sample collection:

- Temperature
- pH
- Turbidity
- Dissolved Oxygen
- Specific Conductivity
- Oxidation-Reduction Potential

S-W will use field parameter results to support the representativeness of the well samples and monitor the relative distribution of oxidizing/reducing conditions.

C.2.2 Depth to Groundwater Measurements

Site groundwater monitoring program for the first four years after remedy implementation will be in accordance with Table C-1, and/or subsequent DTSC-approved modifications.

As the remedy has been designed to control groundwater movement, S-W will collect groundwater elevation data monthly for the first year from monitoring wells and piezometers to monitor whether groundwater movement patterns are consistent with projected design groundwater model conditions for the remedy, as presented in the Feasibility Study (FS) (CDM, 2009). S-W will use the first year's data set to evaluate the effectiveness of the slurry wall segments to divert groundwater, and the effectiveness of the slurry wall breaches to facilitate groundwater movement. After the first year, if groundwater

elevations and movement patterns are consistent with projected design conditions, the frequency of groundwater elevation monitoring will be revised to quarterly. S-W will utilize the quarterly elevation monitoring data sets to continue evaluation of potential seasonal variation in groundwater movement. S-W will evaluate the frequency of groundwater elevation monitoring annually.

Should future construction activities affect groundwater movement or rates of infiltration (e.g., redevelopment of the former Rifkin property or S-W property), S-W will initiate monthly monitoring during and post-construction for a period of at least one year to monitor whether groundwater movement patterns continue to be consistent with projected design groundwater model conditions. If groundwater elevations and movement patterns are consistent with projected design conditions, groundwater elevation monitoring will return to its previously established frequency.

Changes to the frequency of groundwater elevation monitoring resulting from a determination that groundwater movement patterns are inconsistent with projected design conditions are further discussed in Section C.5.3.

C.3 Groundwater Quality Effectiveness Criteria

S-W will analyze the analytical results from sampling of the groundwater monitoring wells to evaluate the effectiveness of the remedy. Table C-2 provides a summary of the groundwater quality effectiveness criteria that S-W will utilize to evaluate the effectiveness of the remedy. The criteria are discussed below.

C.3.1 Excavated and Backfilled Area on Former Rifkin Property

It is anticipated that COC concentrations in groundwater within this area will fluctuate after remedy implementation, as the groundwater comes into equilibrium with the backfill material and surrounding groundwater conditions. S-W will collect analytical samples from wells CDM-101 and CDM-102. Analytical results from a certified laboratory will be used to evaluate whether COC concentrations in groundwater in this area are stable or decreasing by no later than four years after remedy implementation. In addition, S-W will use analytical data of samples from these wells to evaluate whether arsenic concentrations in this area are less than 5,000 micrograms per liter (µg/L) by no later than four years after remedy implementation.

C.3.2 Excavated and Backfilled Area on S-W Property

It is anticipated that COC concentrations in groundwater within this area will fluctuate after remedy implementation, as the groundwater comes into equilibrium with the backfill material and surrounding groundwater conditions. Therefore, S-W will use analytical results of samples from wells CDM-103 and CDM-104 to evaluate whether COC concentrations in groundwater in this area are stable or decreasing by no later than four years after remedy implementation.

C.3.3 North Side on Former Rifkin Property

S-W will analyze analytical results of samples from the Rifkin Guard Wells to evaluate whether arsenic concentration trends are statistically stable or decreasing after remedy implementation.

C.3.4 Central Site on S-W Property

S-W will analyze analytical results of samples from wells CDM-105 and CDM-106 to determine if there is potential movement of COCs in groundwater toward the west side groundwater monitoring wells CDM-107 and CDM-108.

S-W will analyze results of analytical samples from wells CDM-110, CDM-111, CDM-113, and CDM-114 to determine if there is potential change in groundwater quality outside of the area affected by the excavated and backfilled area.

C.3.5 West Side on S-W Property

S-W will analyze results of analytical samples from wells CDM-107 and CDM-108 to evaluate whether trends of COC concentrations in groundwater migrating offsite through the slurry wall breaches toward the Union Pacific Railroad property are statistically stable or decreasing, and whether arsenic concentrations exceed 250 µg/L for CDM-107 or 500 µg/L for CDM-108. These arsenic concentration criteria are based on protection of Temescal Creek channel and further discussed in Section C.6.1.2.

S-W will analyze results of analytical samples from well CDM-109 to evaluate the effectiveness of the slurry wall extension in containing the onsite groundwater plume and to evaluate whether trends of COC concentrations in groundwater present outside the slurry wall are statistically stable or decreasing.

C.3.6 West Side on Union Pacific Railroad Property

S-W will analyze results of analytical samples from wells LF-24 and LF-25 to evaluate whether COC concentrations in groundwater near the Temescal Creek channel are less than Site cleanup goals or whether their trends are statistically stable or decreasing. Since installation in 1996, arsenic concentrations in samples from these wells have been stable or decreasing. Arsenic concentrations in samples from monitoring well LF-24 since the time of installation in 1996 have been less than 36 µg/L. Arsenic concentrations for LF-25 have been less than 36 µg/L since 2006 and are currently demonstrating a decreasing trend.

C.3.7 North Side on S-W Property

S-W will analyze results of analytical samples from well LF-18 to evaluate whether COC concentrations in groundwater near the Temescal Creek channel are less than Site cleanup goals or whether their trends are statistically stable or decreasing.

C.3.8 South Side on Sherwin Avenue

S-W will analyze results of analytical samples from well CDM-112 to evaluate whether COC concentrations in groundwater in this area are less than Site cleanup goals or whether their trends are statistically stable or decreasing.

C.4 Groundwater Movement Effectiveness Criteria

Table C-2 provides a summary of the groundwater movement criteria to be utilized to monitor the effectiveness of the remedy. The criteria are further discussed below.

C.4.1 Groundwater Movement Patterns

S-W will monitor the measurements of depths to groundwater in Site wells to determine if long-term groundwater movement patterns within the S-W property are consistent with projected design groundwater model conditions for the remedy, as presented in the FS (CDM, 2009), and are included at the end of this Attachment C. These projected design conditions include groundwater movement towards the slurry wall breaches and the absence of long-term, localized groundwater mounding.

C.4.2 Depths to Groundwater

S-W will evaluate groundwater elevation measurements to determine if the depths to groundwater are sufficient to minimize potential inundation of subsurface utility corridors.

C.4.3 Arsenic Mass Flux between CDM-101, CDM-102, CDM-104, and PZ-101

S-W will evaluate groundwater elevation measurements, along with concentrations of arsenic in groundwater, from CDM-101, CDM-102, CDM-104, and/or PZ-101 to determine if the net arsenic mass flux within the excavated and backfilled area between the locations of these proposed wells is towards the S-W property west of the former Rifkin property.

As appropriate, the criterion of net mass flux towards the S-W property could be evaluated using other COCs.

C.5 Remedy Effectiveness Evaluation

After remedy implementation, S-W will utilize the groundwater monitoring data sets to evaluate the effectiveness of the remedy and determine if contingency action(s) are needed to achieve Site cleanup goals. The following text summarizes the evaluation process and criteria to be used to determine the need for contingency actions.

C.5.1 Groundwater Quality for Wells CDM-101 thru CDM-104, CDM-107 thru CDM-109, CDM-112, LF-18, LF-24, LF-25, and Rifkin Guard Wells

S-W will evaluate COC concentration trends for these 17 wells by statistical testing, including but not limited to the Mann-Kendall (Gilbert, 1997) nonparametric statistical test. Consistent with U.S. EPA guidance (EPA, 1994), S-W will use a significance level of 0.05 (i.e., a 95% confidence level) in applying the Mann-Kendall nonparametric test. If an increasing COC concentration trend is found, S-W will increase the frequency of monitoring for the well to monthly for three months and use the 95% UCL concentrations from these four events (the previous scheduled event and subsequent three monthly events) in the Mann-Kendall nonparametric test in place of the previous quarterly event result. If this re-evaluation demonstrates a return to a stable or decreasing COC concentration trend, S-W will return the frequency of monitoring for the well to its previously established frequency listed in Table C-1. Otherwise, S-W will provide written recommendations to DTSC for implementation of a contingency action (see Section C.6).

If during establishment of a statistical arsenic concentration trend for wells CDM-107 and CDM-108, arsenic concentrations exceed 250 µg/L for CDM-107 or 500 µg/L for CDM-108, S-W will provide written recommendations to DTSC for implementation of a contingency action (see Section C.6). These arsenic concentration criteria are based on protection of Temescal Creek channel and are further discussed in Section C.6.1.

C.5.2 Groundwater Quality for Wells CDM-101 and CDM-102

If four years after remedy implementation the arsenic concentration threshold criterion of 5,000 µg/L is exceeded in samples from either wells CDM-101 or CDM-102, S-W will provide written recommendations to DTSC for implementation of a contingency action (see Section C.6).

C.5.3 Groundwater Movement Patterns

S-W will perform an estimate of groundwater flow direction and hydraulic gradient following each groundwater elevation monitoring event. S-W will then compare the groundwater flow direction and

measured hydraulic gradient to the projected design groundwater model conditions for the remedy, as presented in the FS (CDM, 2009), or as updated during preparation of the RDIP, and are included at the end of this Attachment C. As discussed in Section C.2, S-W will conduct the first assessment of this criterion after the first year of monthly groundwater elevation monitoring. The groundwater movement conditions that will be monitored as part of the annual assessment will include:

- The slurry wall extension controls groundwater movement to the north and south, in the area of CDM-111 and CDM-113;
- Net groundwater movement within the Excavated and Backfilled Area on S-W property is toward the interceptor trench or the wall breaches near the Union Pacific Railroad property, and not toward Horton Street;
- Net groundwater movement within Excavated and Backfilled Area on former Rifkin property is to the north-northwest;
- Net groundwater movement from the high permeability fill area surrounding CDM-104 is toward the slurry wall breaches near the Union Pacific Railroad property, and not toward the former Rifkin property; and
- Mounding of groundwater, to the extent it occurs, is seasonal and generally follows above average precipitation events and does not result in net groundwater movement toward the Rifkin property, movement of water over the top of the slurry wall, or flow around the slurry wall extension.

If the first assessment determines that groundwater movement patterns are consistent with projected design conditions and DTSC concurs, S-W will perform groundwater elevation monitoring quarterly as discussed in Section C.2.

If the first assessment or any subsequent annual assessment determines that groundwater movement patterns differ significantly from projected design conditions, S-W will provide written recommendation to DTSC for either implementation of additional monitoring/investigation steps or a contingency action.

Additional monitoring/investigation may include but is not limited to continued/return to monthly groundwater monitoring for an additional year, at which time a follow up assessment would be made and the monitoring revised as appropriate. Possible contingency action is discussed in Section C.6.

C.5.4 Depths to Groundwater

If one year after remedy implementation the depth to groundwater in any well is measured at or less than four (4) feet bgs, S-W will reinitiate monthly monitoring for the well to determine if depth to groundwater is exhibiting a rising trend. If the depth to groundwater from three consecutive monthly events is greater than four (4) feet bgs, S-W will return the frequency of monitoring for the well to its previously established frequency. Otherwise, monthly monitoring will continue. If the depth to groundwater in any well is measured at or less than three (3) feet bgs, S-W will provide written recommendations to DTSC for implementation of a contingency action (see Section C.6).

C.5.5 Arsenic Mass Flux between CDM-101, CDM-102, CDM-104, and PZ-101

The projected groundwater model design conditions are intended to prevent long-term (steady-state) groundwater and residual COC movement within the excavated and backfilled area between the

locations of these proposed wells towards the former Rifkin property. This additional criterion for monitoring the effectiveness of the remedy includes maintaining a positive mass flux from the former Rifkin property to the S-W property for each COC. As discussed in Section C.4.3, this criterion is anticipated to apply only to arsenic.

After each groundwater elevation monitoring event for the three wells and one piezometer, S-W will calculate the hydraulic gradient within the excavated and backfilled area on the former Rifkin property and the contiguous backfilled area to the west, on the S-W property. S-W will use the transect method (API, 2003) to calculate the arsenic mass flux in groundwater through the cross-sectional area underlying the Rifkin/S-W property line between these wells for each event using the following equation:

$w = (C)(K)(i)(A)(CF)$

where, w = chemical mass flux through the transect (g/day)

C = concentration of chemical through the transect (mg/L)

K = hydraulic conductivity at the transect (cm/sec)

i = hydraulic gradient at the transect (cm/cm)

A = cross-sectional area associated with the transect (ft3)

CF = conversion factor, 80.3 (ft/cm)/(sec/day)(L/ft3)(g/mg)

The calculated mass flux, w, value for each event will include both the magnitude and direction. The direction will be based on assigning a positive hydraulic gradient, i, if groundwater movement is toward Rifkin and negative for movement away from Rifkin. The concentration, C, for each event will be either (1) the concentration of CDM-104 if the groundwater movement is toward Rifkin, or (2) the average of the arsenic concentration of CDM-101 and CDM-102 if groundwater movement is away from Rifkin.

Due to the uncertainty introduced by variations in percent recovery; quality control; and matrix interferences, there will be inherent variations in the precision and bias of laboratory analytical results for the groundwater samples from the wells used in the flux calculations. Therefore, S-W will use a default tolerance limit of 20 percent to determine if concentrations are considered different for use in calculating mass flux, i.e., mass flux, w, will be set at zero for each event where arsenic concentrations from wells CDM-101, 102, and CDM-104 differ by or less than 20 percent. As appropriate, S-W will apply this criterion to other COCs, if concentrations of other COCs for these three wells differ by more than 20 percent.

After the first year of monthly groundwater monitoring, S-W will sum the monthly arsenic mass flux values to calculate the annual net arsenic mass flux. Each of the monthly mass flux values will represent an approximately equal duration (i.e., one month). If this first year net arsenic mass flux is negative (movement of arsenic away from Rifkin), S-W will proceed to quarterly groundwater monitoring, as discussed in Section C.2.

If the net arsenic mass flux during the first year or any subsequent year is positive (movement of arsenic toward Rifkin), S-W will provide written recommendation to DTSC for either implementation of additional monitoring/investigation steps or a contingency action.

Additional monitoring/investigation may include, but is not limited to, continued/return to monthly groundwater monitoring at these wells for an additional year, at which time a follow up assessment would be made and the monitoring revised as appropriate. Possible contingency action is discussed in Section C.6.

If the net arsenic mass flux during the first year or any subsequent year exceeds the equivalent to arsenic concentrations of 500 µg/L with a groundwater migration rate of 1 foot/day, S-W will provide written recommendation to DTSC for contingency action (see Section C.6).

C.6 Contingency Action

Section C.5 presented the criteria for which written recommendations to DTSC for contingency action will be required. The recommendations for contingency action will be consistent with best engineering practices to minimize the potential for any further spread of the COCs and to strive to restore a stable or decreasing groundwater plume. Such contingency action may include, but not be limited to: additional soil excavation and backfill; modifications to permeability of placed fill; in-situ groundwater treatment or in-place geochemistry modifications within the Site or at the slurry wall breaches; modification to the groundwater containment system; and/or active groundwater extraction and treatment.

The submittal to DTSC for the recommended contingency action would also include effectiveness evaluation criteria for the contingency action. S-W would implement the contingency action after approval by DTSC.

C.6.1 Active Groundwater Extraction and Treatment

Criteria for Rifkin Guard Wells

If verified arsenic concentrations in samples from any Rifkin Guard Well during evaluation of the contingency action exceed the criteria listed in Table C-3, S-W will provide written recommendations to DTSC to implement active groundwater extraction and treatment with disposal/reuse of treated water. The objective of the groundwater extraction contingency action, to address exceedance of the Rifkin Guard Well criteria, would be to prevent further migration of arsenic contaminated groundwater onto the former Rifkin property. For this action, further arsenic migration is defined as northerly groundwater movement across the alignment of the Rifkin Guard Wells.

The submittal to DTSC for active groundwater extraction would also include criteria for evaluating the effectiveness of the extraction. Consistent with existing DTSC procedures, S-W would implement active groundwater extraction and evaluate its effectiveness. This evaluation would include consideration of (1) terminating active groundwater extraction and returning to the original remedy (i.e., natural attenuation of arsenic in groundwater) if criteria listed in Table C-4 are met, or (2) implementation of additional contingency action, if criteria listed in Table C-4 are not met.

Criteria for Wells CDM-107 and CDM-108

If verified arsenic concentrations in samples from CDM-107 or CDM-108 during evaluation of the contingency action exceed the criteria listed in Table C-3, S-W will provide written recommendations to DTSC to implement active groundwater extraction and treatment with disposal/reuse of treated water. The objective of the groundwater extraction contingency action, to address exceedance of the CDM-107/108 criteria, would be to prevent further migration of arsenic contaminated groundwater through one or both of the slurry wall breaches along the Union Pacific Railroad property, as necessary, to maintain protection of Temescal Creek channel. Supporting information for the contingency action

criteria for arsenic listed in Table C-3 for CDM-107 and CDM-108 is presented in the Remedial Action Plan (RAP) (CDM, 2010).

The submittal to DTSC for active groundwater extraction would also include criteria for evaluating the effectiveness of the extraction. Consistent with existing DTSC procedures, S-W would implement active groundwater extraction and evaluate its effectiveness. This evaluation would include consideration of (1) terminating active groundwater extraction and returning to the original remedy (i.e., natural attenuation of arsenic in groundwater) if criteria listed in Table C-4 are met, or (2) implementation of additional contingency action if criteria listed in Table C-4 are not met.

Implementation of Active Groundwater Extraction

The objective of the active groundwater extraction contingency action would be to control further migration of arsenic impacted groundwater on the former Rifkin property or through the slurry wall breaches. A contingency action that includes groundwater extraction would be implemented within the area of the higher permeability backfill on the S-W property, and would be consistent with evaluation presented in the Remedial Action Plan (CDM, 2010) and/or subsequent DTSC-approved modifications. The uniform nature of this higher permeability backfill would facilitate enhanced hydraulic communication with surrounding native materials, backfill in the remainder of the Site, and the interceptor trench.

Using the groundwater model for the Unit A aquifer (A-zone) developed for the FS (CDM, 2009), as updated during preparation of the RDIP, a groundwater extraction scenario has been evaluated for conditions anticipated to be present after implementation of the preferred remedy. Based on the groundwater model simulation results, a single groundwater extraction well within the higher permeability backfill on the S-W property would be sufficient to simultaneously meet the objectives of contingency actions for both the former Rifkin property and the slurry wall breaches. Under this selected groundwater extraction scenario, a pumping rate of approximately 3.1 gallons per minute (gpm) from this well would be sufficient to maintain a hydraulic capture zone that extends to the Rifkin Guard Wells and the downgradient slurry wall breach nearest to the source area. The model indicates that of the two downgradient slurry wall breaches along the Union Pacific Railroad property, the one associated with well CDM-108 is the more likely to first have potential increases in COC concentrations that would trigger a need for contingency action.

The groundwater model simulation results include a presentation of the steady-state potentiometric surface contours and particle tracking showing groundwater movement in the A-zone that would develop due to pumping from this single groundwater extraction well within the high permeability backfill on the S-W property. The results demonstrate that this contingency groundwater extraction action would adequately provide control of migration of COCs in groundwater.

C.7 References

API, 2003. Groundwater Remediation Strategies Tool, Regulatory Analysis & Scientific Affairs Department, Publication Number 4730. December 2003.

CDM, 2010. Final Remedial Action Plan, Sherwin-Williams Company, Emeryville, California. Camp Dresser & McKee Inc. June 14, 2010.

CDM, 2009. Feasibility Study, Sherwin-Williams Company, Emeryville, California. Camp Dresser & McKee Inc. April 1, 2009.

LFR, 2006a. Groundwater Monitoring Plan Assessment, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. LFR Inc. June 28, 2006.

LFR, 2006b. Quality Assurance Project Plan, Sherwin-Williams Facility, 1450 Sherwin Avenue, Emeryville, California. LFR Inc. July 13, 2006.

Table C-1
Groundwater Well Construction Details and Monitoring Program
Sherwin-Williams Emeryville Operation and Maintenance Plan

Well Number	**Well Construction Details**										***Well Monitoring Program After Excavation/Backfill*** [1]				
	Date Constructed	***Top of Casing Elevation*** (feet NAVD88)	***Total Depth*** (feet bgs)	***Casing Material***	***Casing Diameter*** (inches)	***Screen Slot Size*** (inches)	***Screen Interval Depths*** Top (feet toc)	Bottom (feet toc)	***Screen Interval Elevations*** Top (feet NAVD88)	Bottom (feet NAVD88)	***Depth To Groundwater*** [2]	***Arsenic by EPA Method 6010B***	***Volatile Organic Compounds by EPA Method 8260B***	***Field Parameters*** [3]	***TPH-G by EPA Method 8260 AND TPH-D/MO by EPA Method 8015M with SGC***
Existing Wells															
Horton Street - City of Emeryville															
LF-12	11/2/1989	17.65	18	PVC	4	0.020	7.5	17.5	10.2	0.1	Monthly/Quarterly	Annually	Annually	Each Event	Annually
LF-13	11/2/1989	17.48	18	PVC	4	0.020	7.0	17.0	10.5	0.5	Well retained for possible future monitoring, if needed				
LF-27	12/22/1997	17.83	18	PVC	2	0.010	10.0	18.0	7.8	-0.2	Well retained for possible future monitoring, if needed				
LF-28	12/22/1997	17.09	18	PVC	2	0.010	6.5	18.0	10.6	-0.9	Monthly/Quarterly	Annually	Annually	Each Event	Annually
LF-29	12/23/1997	16.40	20	PVC	2	0.010	6.0	19.0	10.4	-2.6	Well retained for possible future monitoring, if needed				
LF-30	12/23/1997	15.86	19	PVC	2	0.010	6.0	18.5	9.9	-2.6	Well retained for possible future monitoring, if needed				
Former Rifkin Property - Novartis Vaccines and Diagnostics, Inc.															
RP-1[a]	7/26/1994	17.84	13	PVC	2	0.010	7.0	12.0	10.8	5.8	Monthly/Quarterly	Quarterly [4]	Annually	Each Event	--
RP-2[a]	7/25/1994	17.94	15	PVC	2	0.010	8.5	14.5	9.4	3.4	Monthly/Quarterly	Semi-Annually	Annually	Each Event	--
RP-3	7/26/1994	17.87	13	PVC	2	0.010	8.0	12.5	9.9	5.4	Monthly/Quarterly	Semi-Annually	Annually	Each Event	--
RP-4[a]	7/25/1994	17.83	17	PVC	2	0.010	7.0	17.0	10.8	0.8	Monthly/Quarterly	Quarterly [4]	Annually	Each Event	--
RP-5[a]	7/25/1994	17.74	15	PVC	2	0.010	7.0	15.0	10.7	2.7	Monthly/Quarterly	Semi-Annually	Annually	Each Event	--
LF-35	9/21/199	18.93	27	PVC	2	0.010	24.0	27.0	-5.1	-8.1	Monthly/Quarterly	Annually	Annually	Each Event	--
LF-36[a]	1/3/2000	18.87	16	PVC	2	0.020	7.0	16.0	11.9	2.9	Monthly/Quarterly	Semi-Annually	Annually	Each Event	--
LF-37	1/4/2000	18.54	16	PVC	2	0.020	7.0	16.0	11.5	2.5	Monthly/Quarterly	Semi-Annually	Annually	Each Event	--
LF-38	1/4/2000	18.51	27	PVC	2	0.020	20.0	27.0	-1.5	-8.5	Monthly/Quarterly	Annually	Annually	Each Event	--
LF-39	1/3/2000	18.97	26	PVC	2	0.020	18.0	26.0	1.0	-7.0	Monthly/Quarterly	Annually	Annually	Each Event	--
LF-40	1/4/2000	18.84	15	PVC	2	0.020	7.0	15.0	11.8	3.8	Monthly/Quarterly	Semi-Annually	Annually	Each Event	--
LF-41[a]	12/29/1999	18.24	15	PVC	2	0.020	7.0	15.0	11.2	3.2	Monthly/Quarterly	Semi-Annually	Annually	Each Event	--
EX-14	12/29/1999	18.74	16	SS	6	0.010	5.5	15.5	13.2	3.2	Well retained for possible future monitoring, if needed				
EX-15	12/29/1999	17.88	17	SS	6	0.010	7.0	17.0	10.9	0.9	Well retained for possible future monitoring, if needed				
MW-1	12/9/1994	16.48	19	PVC	2	0.010	7.0	17.0	9.5	-0.5	Well retained for possible future monitoring, if needed				
MW-2	12/8/1994	16.29	19	PVC	2	0.010	5.0	17.0	11.3	-0.7	Well retained for possible future monitoring, if needed				
MW-3	12/8/1994	17.30	20	PVC	2	0.010	6.5	19.5	10.8	-2.2	Monthly/Quarterly	Quarterly [4]	Annually	Each Event	--
Sherwin-Williams Property															
LF-18	2/5/1996	15.75	19	PVC	2	0.010	8.0	18.0	7.8	-2.3	Monthly/Quarterly	Annually	Annually	Each Event	--
LF-42	1/5/2000	17.29	16	PVC	2	0.020	7.0	15.0	10.3	2.3	Monthly/Quarterly	Semi-Annually	Annually	Each Event	--
Union Pacific Railroad Property															
LF-24	4/4/1996	12.92	17	PVC	2	0.010	7.0	17.0	5.9	-4.1	Annually	Annually	Annually	Each Event	--
LF-25	4/4/1996	14.01	18	PVC	2	0.010	8.0	18.0	6.0	-4.0	Annually	Annually	Annually	Each Event	--
Offsite Property - Madison Bay Street, LLC															
MD-5	4/4/2003	12.03	16	PVC	0.75	0.010	6.0	16.0	6.0	-4.0	Monthly/Quarterly	--	--	--	--

Table C-1
Groundwater Well Construction Details and Monitoring Program
Sherwin-Williams Emeryville Operation and Maintenance Plan

Well Number	Well Construction Details										*Well Monitoring Program After Excavation/Backfill* [1]				
	Date Constructed	*Top of Casing Elevation* (feet NAVD88)	*Total Depth* (feet bgs)	*Casing Material*	*Casing Diameter* (inches)	*Screen Slot Size* (inches)	*Screen Interval Depths* Top (feet toc)	Bottom (feet toc)	*Screen Interval Elevations* Top (feet NAVD88)	Bottom (feet NAVD88)	*Depth To Groundwater* [2]	*Arsenic by EPA Method 6010B*	*Volatile Organic Compounds by EPA Method 8260B*	*Field Parameters* [3]	*TPH-G by EPA Method 8260 AND TPH-D/MO by EPA Method 8015M with SGC*
New Wells															
Former Rifkin Property - Novartis Vaccines and Diagnostics, Inc.															
CDM-101	3/8/2012	18.97	21	PVC	2	0.010	10.7	20.7	8.3	-1.7	Monthly/Quarterly	Semi-Annually	Semi-Annually	Each Event	--
CDM-102	3/8/2012	17.61	20	PVC	2	0.010	10.5	20.5	8.1	-1.9	Monthly/Quarterly	Semi-Annually	Semi-Annually	Each Event	--
Sherwin-Williams Property															--
CDM-103	3/7/2012	20.56	20	PVC	2	0.010	12.8	22.8	7.8	-2.2	Monthly/Quarterly	Semi-Annually	Annually	Each Event	--
CDM-104	3/9/2012	18.60	18	PVC	2	0.010	10.8	20.8	7.8	-2.2	Monthly/Quarterly	Semi-Annually	Annually	Each Event	--
CDM-105	3/7/2012	15.83	15	PVC	2	0.010	7.6	17.6	8.2	-1.8	Monthly/Quarterly	Semi-Annually/Annually [5]	Annually	Each Event	--
CDM-106	3/7/2012	16.21	15.5	PVC	2	0.010	8.3	18.3	7.9	-2.1	Monthly/Quarterly	Semi-Annually/Annually [5]	Annually	Each Event	--
CDM-107	2/20/2012	17.38	16.5	PVC	2	0.010	9.5	19.5	7.9	-2.1	Monthly/Quarterly	Semi-Annually	Semi-Annually	Each Event	--
CDM-108	2/20/2012	17.71	17	PVC	2	0.010	9.6	19.6	8.1	-1.9	Monthly/Quarterly	Semi-Annually	Semi-Annually	Each Event	--
CDM-109	2/20/2012	15.44	15	PVC	2	0.010	7.1	17.1	8.4	-1.6	Monthly/Quarterly	Semi-Annually/Annually [5]	Annually	Each Event	--
CDM-110	3/12/2012	15.62	18	PVC	2	0.010	7.6	17.6	8.0	-2.0	Monthly/Quarterly	Semi-Annually/Annually [5]	Annually	Each Event	Annually
CDM-111	3/9/2012	18.14	17	PVC	2	0.010	10.3	20.3	7.8	-2.2	Monthly/Quarterly	Semi-Annually/Annually [5]	Annually	Each Event	Annually
CDM-112	3/8/2012	15.70	18	PVC	2	0.010	7.7	17.7	8.1	-2.0	Monthly/Quarterly	Annually	Annually	Each Event	--
CDM-113	3/8/2012	15.47	18	PVC	2	0.010	7.5	17.5	8.0	-2.0	Monthly/Quarterly	Annually	Annually	Each Event	--
CDM-114	3/12/2012	14.72	17.5	PVC	2	0.010	6.7	16.7	8.0	-2.0	Monthly/Quarterly	Annually	Annually	Each Event	Annually
New Piezometers															
Sherwin-Williams Property															--
PZ-101	3/9/2012	19.01	19	PVC	1	0.010	11.5	21.5	7.5	-2.5	Monthly/Quarterly	--	--	--	--
PZ-102	3/12/2012	16.64	19	PVC	1	0.010	8.6	18.6	8.0	-2.0	Monthly/Quarterly	--	--	--	--

Notes:

NADV88: North American Vertical Datum of 1988

bgs: below ground surface

toc: top of casing

PVC: polyvinyl chloride

SS: stainless steel

a - Designated Rifkin Guard Well.

1 - Monitoring program is only for the first four years after remedy implementation.

2 - Depth to groundwater measured monthly for first year and then quarterly for next three years; should there be a change in the rate of infiltration that affects groundwater flow conditions, monthly monitoring would be reinitiated for at least one year.

3 - Field parameters include: temperature, pH, turbidity, dissolved oxygen, oxidation-reduction potential, and specific conductivity.

4 - Frequency of monitoring for arsenic for this well will be quarterly as arsenic concentration for this well increased above its historical maximum detection during remedy implementation.

5 - Frequency of monitoring for arsenic for this well will be semi-annually for the first two years; if after two years arsenic concentration is stable to decreasing, frequency of monitoring will be modified to annually after DTSC concurrence; otherwise, it will remain semi-annually.

Table C-2

Remedy Effectiveness Evaluation Criteria

Sherwin-Williams Emeryville Operation and Maintenance Plan

Groundwater Quality Effectiveness Criteria [1]	
Well	**Remedy Effectiveness Evaluation Criteria**
Former Rifkin Property	
CDM-101	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing four years after remedy implementation, and arsenic is less than 5,000 ug/L four years after remedy implementation
CDM-102	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing four years after remedy implementation, and arsenic is less than 5,000 ug/L four years after remedy implementation
RP-1[a]	Arsenic concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
RP-2[a]	Arsenic concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
RP-4[a]	Arsenic concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
RP-5[a]	Arsenic concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
LF-36[a]	Arsenic concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
LF-41[a]	Arsenic concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
Sherwin-Williams Property	
LF-18	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
CDM-103	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
CDM-104	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
CDM-107	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
CDM-108	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
CDM-109	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
CDM-112	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
Union Pacific Property	
LF-24	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
LF-25	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing

Groundwater Movement Effectiveness Criteria
1. Long-term groundwater flow patterns are consistent with projected design groundwater model conditions.
2. Long-term arsenic in groundwater mass flux at the Rifkin/S-W property line between CDM-101/CDM-102 and PZ-101/CDM-104 is westward, from the former Rifkin property to the S-W property.
3. Absence of long-term groundwater mounding at the Site.
4. Depths to groundwater at all wells are more than 3 feet below ground surface.

Notes:

COC: chemical of concern

ug/L: microgram per liter

a - Designated Rifkin Guard Well.

1 - Wells not presented do not have groundwater quality remedy effectiveness evaluation criteria.

Table C-3

Criteria for Implementing Active Groundwater Extraction

Sherwin-Williams Emeryville Operation and Maintenance Plan

Well	Criteria for Implementing Active Groundwater Extraction [1]	*Maximum Arsenic Concentration Detected from Well thru February 2012* [2]
Former Rifkin Property (Guard) Wells		
RP-1[a]	Increasing arsenic concentration trend with concentration greater than higher of 150 ug/L or 150% of the maximum arsenic concentration detected for the well prior to or during remedy implementation	140
RP-2[a]	Increasing arsenic concentration trend with concentration greater than higher of 75 ug/L or 150% of the maximum arsenic concentration detected for the well prior to or during remedy implementation	42
RP-4[a]	Increasing arsenic concentration trend with concentration greater than higher of 75 ug/L or 150% of the maximum arsenic concentration detected for the well prior to or during remedy implementation	25
RP-5[a]	Increasing arsenic concentration trend with concentration greater than higher of 75 ug/L or 150% of the maximum arsenic concentration detected for the well prior to or during remedy implementation	38
LF-36[a]	Increasing arsenic concentration trend with concentration greater than higher of 75 ug/L or 150% of the maximum arsenic concentration detected for the well prior to or during remedy implementation	65
LF-41[a]	Increasing arsenic concentration trend with concentration greater than higher of 150 ug/L or 150% of the maximum arsenic concentration detected for the well prior to or during remedy implementation	97
Sherwin-Williams Property Wells		
CDM-107	Increasing arsenic concentration trend with concentration greater than 250 ug/L	Not applicable [3]
CDM-108	Increasing arsenic concentration trend with concentration greater than 500 ug/L	Not applicable [3]

Notes:

COC: chemical of concern

ug/L: microgram per liter

a - Designated Rifkin Guard Well.

1 - Wells not presented do not have criteria for implementing active groundwater extraction.

2 - CDM Smith, 2012. Remedy Implementation Completion Report, Sherwin-Williams Company, Emeryville, California. July 25.

Table C-4

Criteria to Terminate Active Groundwater Extraction

Sherwin-Williams Emeryville Operation and Maintenance Plan

Well	*Criteria to Terminate Active Groundwater Extraction and Return to Monitored Natural Attenuation* [1]	*Maximum Arsenic Concentration Detected from Well thru April 2011* [2]
Former Rifkin Property		
RP-1[a]	Arsenic concentration less than higher of 100 ug/L or maximum arsenic concentration detected prior to or during remedy implementation	95
RP-2[a]	Arsenic concentration less than higher of 50 ug/L or maximum arsenic concentration detected prior to or during remedy implementation	42
RP-4[a]	Arsenic concentration less than higher of 50 ug/L or maximum arsenic concentration detected prior to or during remedy implementation	19
RP-5[a]	Arsenic concentration less than higher of 50 ug/L or maximum arsenic concentration detected prior to or during remedy implementation	38
LF-36[a]	Arsenic concentration less than higher of 65 ug/L or maximum arsenic concentration detected prior to or during remedy implementation	65
LF-41[a]	Arsenic concentration less than higher of 100 ug/L or maximum arsenic concentration detected prior to or during remedy implementation	97
Sherwin-Williams Property		
CDM-107	Arsenic concentration less than 250 ug/L	Not applicable [3]
CDM-108	Arsenic concentration less than 500 ug/L	Not applicable [3]

Notes:

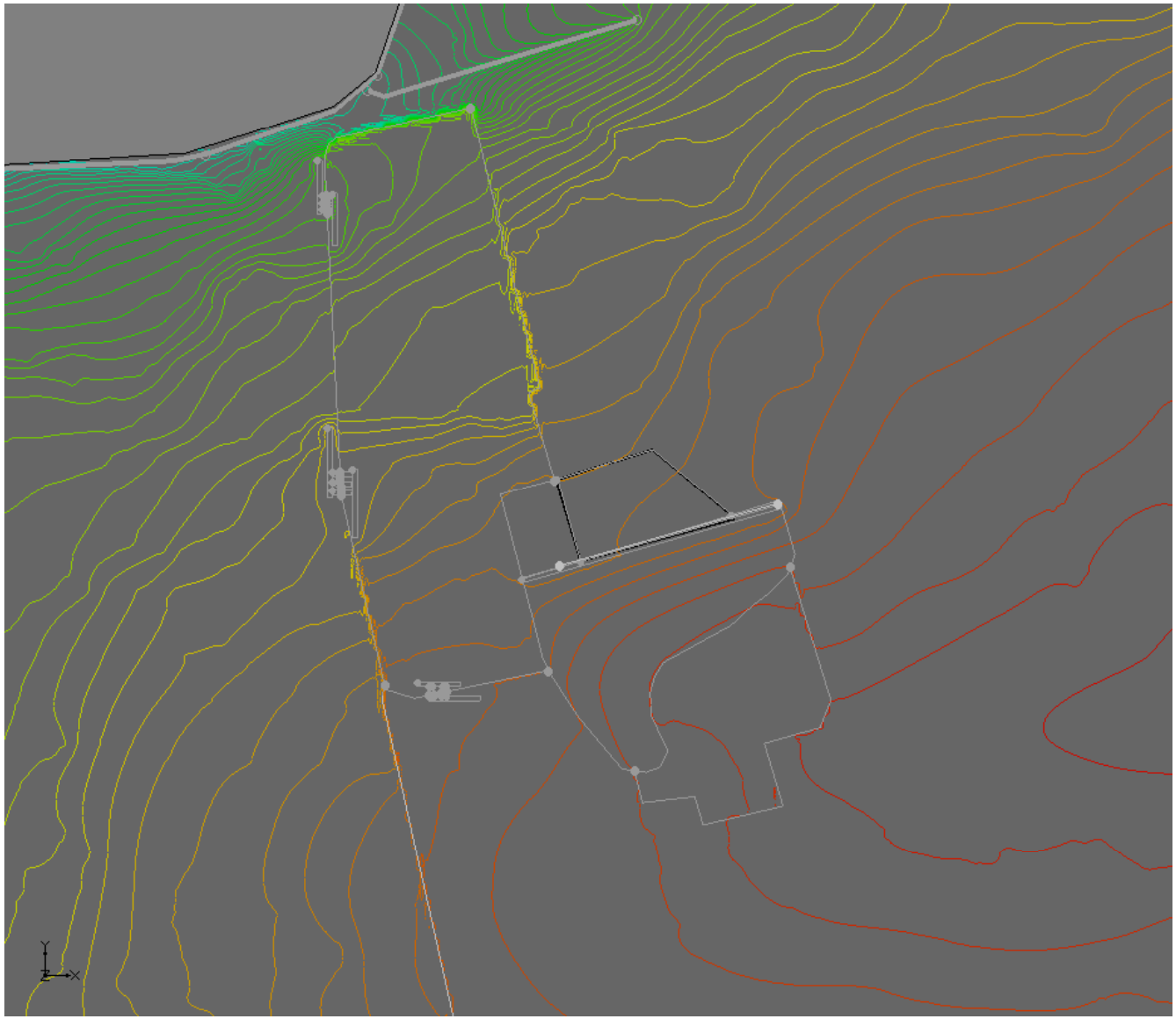
ug/L: microgram per liter

a - Designated Rifkin Guard Well.

1 - Wells not presented do not have criteria to terminate active groundwater extraction and return to monitored natural attenuation.

2 - LFR Inc. 2011. Combined Groundwater and NPDES Self-Monitoring Report, Sherwin-Williams Facility, 1450 Sherwin Avenue, Emeryville, California. April 29.

Projected Design Groundwater Model Conditions From Appendix B of 2009 Feasibility Study



See Figure 6-18 for Location and Description of Site Features for this Alternative

CDM

Figure 6-19
Alternative 6 Simulated Potentiometric Surface
Sherwin-Williams Company – Emeryville, California

From Appendix B of 2009 Feasibility Study



Figure 6-20
Alternative 6 Simulated Particle Tracks
Sherwin-Williams Company – Emeryville, California

From Appendix B of 2009 Feasibility Study

Attachment D

Soil Gas Evaluation Strategy

Attachment D

Soil Gas Evaluation

After completion of remediation implementation activities, S-W installed soil gas monitoring points at the Site to collect and analyze soil gas samples. This section provides the objective and methodology for sample collection. Table D-1 provides a summary of construction details of the installed soil gas monitoring points.

The monitoring points were installed at locations in proximity to previous soil gas sample locations at the Site, which were conducted in November and December 2006 and reported in CDM's January 30, 2007 report to DTSC. Attachment A, Drawing 3 of this Operation and Maintenance (O&M) Plan presents the locations for these monitoring points.

In order to have representative sample collection of steady-state conditions in the vadose zone after completion of backfill activities and evaluate potential seasonal variability, soil gas samples will be collected in June 2012 and December 2012.

Following the collection and analysis of soil gas samples from the December 2012 event, a data summary and evaluation report will be submitted to DTSC. The report will be submitted by the later of January 31, 2013 or within six weeks after receipt of all analytical reports from the laboratory. The report will contain summaries of the monitoring program, deviations, if any, from the strategy and/or methodology presented in this O&M Plan, and soil gas sample results. The report will evaluate if the results are above cleanup goals and, if needed, present recommendations for continued soil gas evaluation.

The results from the June 2012 event were provided to DTSC following this event, and without evaluation. The June 2012 results are included in Table D-2.

The O&M Plan will be amended, as needed, to include appropriate engineering controls that would be implemented as part of redevelopment if post-excavation sampling reveals that residual soil gas is present above indoor air protective levels. Engineering controls could include: increased building indoor air ventilation; sub-slab depressurization; and/or vapor barriers in combination with other controls.

Whether engineering controls are deemed necessary to address potential indoor vapor intrusion concerns, a long-term soil gas monitoring program may still be appropriate for continued evaluation.

D.1 Soil Gas Sample Collection and Analysis

Soil gas monitoring points were installed at 12 locations at the Site. These locations are in proximity to previous soil gas sample locations at the Site, see Attachment A, Drawing 3 of this O&M Plan.

D.2 Pre-Sampling Activities

Prior to installation of the soil gas monitoring points, installation permits were obtained from Alameda County Public Works Agency (ACPWA) and Underground Service Alert (USA) was contacted at least 72 hours prior to beginning fieldwork to determine the locations of any subsurface utilities. At potential

monitoring points outside of the excavation, S-W coordinated with S-W and Novartis personnel to assist in locating underground utilities.

D.3 Soil Gas Monitoring Point Installation

Methods to penetrate the subsurface for installation of soil gas monitoring points consisted of Concrete Coring (as necessary) and Direct Push. Overlying soil at portions of the Site may be paved asphalt and require coring prior to drilling.

The events for soil gas monitoring point installation were in the following order:

1. Used a concrete coring unit to penetrate the asphalt, where present, at the proposed locations.

2. Used a direct push rig to penetrate through soil with 1.5-inch outside diameter hardened steel rods to approximately 5 feet below ground surface (bgs), or the desired target depth depending on depth to groundwater. Retracted rods slightly to expose soil formation and set monitoring point. As the locations are to be within backfill from the remediation implementation or previous investigation areas, soil cores were not collected.

3. Attached a measured length of 1/8-inch outside diameter Nylaflow tubing to a soil gas sampling point. The point consisted of a six-inch stainless steel soil gas implant screen. The point was hung through the rods via the tubing and placed one foot above the bottom of the borehole. The point was surrounded with #2/12 sand (or equivalent) to two feet above the bottom of the borehole; with the point centered in the sand. As the rods were retracted, one foot of dry bentonite chips was placed above the sand, and then hydrated bentonite slurry placed to 0.5 foot of the surface. The bentonite sealed the point from the ground surface.

4. The monitoring point was completed with sand to the surface and a flush mounted vault.

The monitoring points were installed by a licensed driller: TEG, Inc. The completed monitoring points were allowed to equilibrate for at least 24 hours prior to sampling.

As stated above, the depth of the monitoring point placements was 4 feet bgs or shallower. DTSC guidelines specify 5 feet bgs as an appropriate depth to collect soil gas samples in order to minimize effects from atmospheric conditions, including changes in barometric pressure, temperature, and/or breakthrough of ambient air from the surface. Due to the shallow groundwater table (encountered at 4 to 7 feet bgs), S-W installed monitoring points at 5 feet bgs or shallower in order to minimize moisture content in the soil gas samples. No deeper soil gas samples will be collected. At locations where shallower groundwater was encountered, S-W installed monitoring points as shallow as 3 feet bgs, as necessary. S-W did not install monitoring points at locations with groundwater at or shallower than 4 feet bgs. Table D-1 provides a summary of construction details of the installed soil gas monitoring points.

D.4 Soil Gas Sampling Methodology

The soil gas sampling methodology is in accordance with the Remedial Design Implementation Plan (RDIP) (CDM Smith, 2012) and is consistent with applicable portions of the following guidance documents:

Advisory – Soil Gas Investigations. California Environmental Protection Agency, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, and San Francisco Regional Water Quality Control Board. April 2012.

Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). California Environmental Protection Agency, Department of Toxic Substances Control, October 2011.

A schematic of the sampling train is shown in Figure D-1. Swagelock® fittings or equivalent will be used for all connections. After assembly, the sampling train will be tested for leaks by performing a vacuum shut-in test. The downhole valve will be closed and a test vacuum of at least 100 inches of water column (in-H2O) will be placed on the sampling train for at least one minute with a mechanical or hand pump, dedicated purge vacuum container, or equivalent. The test will be monitored using a vacuum gauge connected to the train. After the shut-in test, three volumes of air will be purged using a 200 milliliter per minute (mL/min) flow regulator, in order to minimize partitioning or short circuiting of soil gas flow paths, and monitored with a vacuum gauge connected to the train.

Helium gas will be used as a leak check compound to ensure that the bentonite seal is intact. After the shut-in test, a shroud will be placed over the monitoring point and shut-off valve. The atmosphere inside the shroud will be filled with helium. The shroud will have weather stripping along its base in order to maintain a constant leak check concentration in the atmosphere around the sampling location. The helium concentration within the shroud will be monitored using a portable helium detector.

The leak check analysis will be performed during the three volume purge test. After purging 1.5 volumes, the purge will be stopped, and a clean 50 cc disposable, syringe will be used to draw sample from a sample port in the line, see Figure D-1. The syringe sample will be pushed into the helium detector to test for helium. The presence of helium in the sample would be indicative of leak in the seal. If not detected, the purge will continue again to complete the remaining purge. After completing the three volume purge, one more sample will be drawn with a syringe and pushed into the helium detector to check for leak.

After completion of the two leak checks and three volume purge, soil gas will be collected in a 1-liter Summa canister using a flow regulator of less than 150 mL/min, in order to minimize partitioning or short circuiting of soil gas flow paths. Each Summa canister will consist of a stainless steel canister that will be under absolute vacuum (29 in. Hg). All canisters will be provided by and samples will be submitted to a certified air quality laboratory. All sample canisters will be purged and certified by the laboratory to be free of VOCs at the specified detection limits.

If the shut-in test cannot maintain a vacuum and/or helium is detected during purging, the seals will be checked and corrected if necessary and the test(s) repeated. If the problem(s) cannot be corrected, the monitoring point will be abandoned without sample collection and sealed, and a new point installed at a new location.

D.5 Sample Analysis

Soil gas samples will be analyzed, within 14 days of collection, at an analytical laboratory for VOCs by EPA Method TO-15. The samples will also be analyzed for helium by ASTM D-1946 (modified). Additionally, samples will be analyzed for oxygen, carbon dioxide, and methane by ASTM D-1946 (modified). Samples will be handled under standard chain of custody (COC) protocol at all times.

D.6 Quality Assurance and Quality Control

The Quality Assurance/Quality Control (QA/QC) plan for the soil gas evaluation was included with the RDIP in its Appendix C (CDM, Smith 2012). The plan provides methodology to manage overall quality control of sample collection, collection of original data recorded in field notebooks, sample identification tags, chain-of-custody records, data quality, equipment calibrations, and quality control tests. The plan also provides details on the project organization structure and identifies the duties and responsibilities of key personnel.

D.6.1 Field Samples

Field quality control/quality assurance (QA/QC) samples will be collected and analyzed to establish confidence in the sample collecting procedures. One duplicate sample will be collected over the each soil gas sampling event. This sample will be subject to the same sample analysis as the original sample. In addition a trip blank sample will be collected to ensure the integrity of sample canisters during shipping and handling. A trip blank sample will be a 1-liter Summa canister that will travel from the laboratory to the Site, will remain at the Site during each sampling event, and travel back to the laboratory for analysis. The trip blank canister will not be exposed to atmosphere. Equipment blanks will not be collected.

If field samples are found to have been impacted with helium after sample analysis, such samples will be considered to be invalid and require re-sampling at minimum, and may also require re-installation of the point.

D.6.2 Decontamination Procedures

All down-hole equipment will be decontaminated before and after each use. Decontamination will be accomplished by steam cleaning or washing in a solution of Alconox or equivalent non-phosphate detergent, followed by a double rinsing with clean water. Decontamination water will be containerized in 55-gallon drums, labeled, and retained at the Site until characterized for proper disposal.

D.7 Sample Labeling

Samples will be labeled with a unique identification name, date, time, location, and sampler's initials. The identification name will consist of the location name and sample date: Location Name – Sample Type – Sample Date.

D.8 Characterization and Disposal of Investigation Derived Waste

Soil cuttings and waste water will be containerized in separate 55-gallon drums, labeled, and held at a paved portion of the Site until characterized for proper disposal. Within 90 days from the generation of the waste, S-W will arrange for pickup and disposal.

D.9 Monitoring Point Sealing

After the completion of all soil gas sampling events, the monitoring points will be abandoned by pulling out the implant tubing. Since the boreholes are completed above the water table and contain bentonite seals, installation of additional subsurface seals is not anticipated. In accordance with ACPWA abandonment requirements, the vaults will be removed after abandonment and each borehole will be sealed at the surface with a mixture of Portland cement and bentonite slurry. The slurry will be

troweled flush with the surface, and as needed for selected locations, coated with a blackening material for blending with the asphalt.

D.10 References

CDM Smith, 2012. Remedy Implementation Completion Report, Sherwin-Williams Company, Emeryville, California. CDM Smith Inc. July 25, 2012.

Table D-1
Soil Gas Monitroing Point Construction Details
Sherwin-Williams Emeryville Operation and Maintenance Plan

Well Number	**Well Construction Details**					
	Date Constructed	***Total Depth*** (feet bgs)	***Tubing Material***	***Tubing Diameter*** (inches)	***Screen Interval Depths*** Top (feet toc)	Bottom (feet toc)
Former Rifkin Property - Novartis Vaccines and Diagnostics, Inc.						
SGMP-10	7/26/1994	5	Nyaflow	1/8	4.5	5.0
SCMP-11	7/25/1994	5	Nyaflow	1/8	4.5	5.0
SCMP-12	7/26/1994	5	Nyaflow	1/8	4.5	5.0
Sherwin-Williams Property						
SGMP-01	2/5/1996	3	Nyaflow	1/8	2.5	3.0
SGMP-02	1/5/2000	5	Nyaflow	1/8	4.5	5.0
SGMP-03	3/7/2012	4	Nyaflow	1/8	3.5	4.0
SGMP-04	3/7/2012	5	Nyaflow	1/8	4.5	5.0
SGMP-05	2/20/2012	5	Nyaflow	1/8	4.5	5.0
SGMP-06	2/20/2012	5	Nyaflow	1/8	4.5	5.0
SGMP-07	2/20/2012	3.5	Nyaflow	1/8	3.0	3.5
SGMP-08	3/12/2012	3.5	Nyaflow	1/8	3.0	3.5
SGMP-09	3/9/2012	3	Nyaflow	1/8	2.5	3.0

Notes:
bgs: below ground surface
toc: top of casing

Table D-2
Sherwin-Williams Emeryville Remediation Project
SOIL GAS SAMPLE RESULTS - June 6 and 7, 2012

Chemical	Unit	Action Level	Soil Gas Monitoring Point (SGMP)													Ambient Condition	Trip Blank
			SGMP-01	SGMP-02	SGMP-03	SGMP-04	SGMP-05	SGMP-06	SGMP-07	SGMP-08	SGMP-09	SGMP-10	SGMP-10 Duplicate	SGMP-11	SGMP-12		
Fixed Gases by ASTM-D1946																	
Helium	% v/v	5	<0.039	**0.38**	<0.038	<0.041	<0.041	<0.043	<0.040	**0.05**	**0.51**	<0.040	<0.042	<0.042	<0.036	<0.020	<0.020
Carbon Dioxide	% v/v	--	**0.015 J**	**7.9**	**25**	**7.1**	**7.3**	**8**	**18**	**0.07**	**0.071**	**18**	**18**	**13**	**24**	**0.046**	<0.010
Methane	% v/v	4.4 - 17	**0.00026 J**	**0.00052**	**40**	**0.047**	**0.38**	**3.8**	**12**	**0.34**	**0.00096**	**0.19**	**0.19**	**4.6**	**0.17**	**0.00023 J**	**0.00014 J**
Nitrogen	% v/v	--	**77**	**80**	**33**	**87**	**87**	**81**	**66**	**86**	**75**	**77**	**77**	**78**	**72**	**75**	**97**
Oxygen	% v/v	--	**19**	**7.1**	**0.94**	**1.7**	**1.2**	**2.2**	**1.1**	**10**	**20**	**1.7**	**1.3**	**1.3**	**1.4**	**22**	<0.20

Table D-2
Sherwin-Williams Emeryville Remediation Project
SOIL GAS SAMPLE RESULTS - June 6 and 7, 2012

Chemical	Unit	Action Level	Soil Gas Monitoring Point (SGMP)													Ambient Condition	Trip Blank
			SGMP-01	SGMP-02	SGMP-03	SGMP-04	SGMP-05	SGMP-06	SGMP-07	SGMP-08	SGMP-09	SGMP-10	SGMP-10 Duplicate	SGMP-11	SGMP-12		
Volatile Organic Compounds (VOCs) by TO-15 in ppm v/v																	
1,1,1-Trichloroethane	ppm v/v	179	<0.0003	**0.00028 J**	<0.0072	<0.0003	<0.0003	<0.08	<0.72	<0.022	<0.0003	<0.00076	<0.00078	<0.00066	<0.0017	<0.0003	<0.0003
1,1,2,2-Tetrachloroethane	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
1,1,2-Trichloro-1,2,2-trifluoroethane	ppm v/v	--	**0.00022 J**	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
1,1,2-Trichloroethane	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
1,1-Dichloroethane	ppm v/v	--	<0.0003	<0.0003	<0.0072	<0.0003	<0.0003	<0.08	<0.72	<0.022	<0.0003	<0.00076	<0.00078	<0.00066	<0.0017	<0.0003	<0.0003
1,1-Dichloroethene	ppm v/v	--	<0.0008	<0.0008	<0.019	<0.0008	<0.0008	<0.21	<1.9	<0.059	<0.0008	<0.002	<0.0021	<0.0018	<0.0045	<0.0008	<0.0008
1,2,4-Trichlorobenzene	ppm v/v	--	<0.0025	<0.0025	<0.06	<0.0025	<0.0025	<0.67	<6	<0.19	<0.0025	<0.0063	<0.0065	<0.0055	<0.014	<0.0025	<0.0025
1,2,4-Trimethylbenzene	ppm v/v	--	**0.00071 J**	**0.011**	<0.06	**0.011**	**0.00067 J**	**0.39 J**	<6	**0.034 J**	**0.0032**	**0.013**	**0.012**	**0.004 J**	**0.011 J**	<0.0025	<0.0025
1,2-Dibromoethane (EDB)	ppm v/v	--	<0.0008	<0.0008	<0.019	<0.0008	<0.0008	<0.21	<1.9	<0.059	<0.0008	<0.002	<0.0021	<0.0018	<0.0045	<0.0008	<0.0008
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
1,2-Dichlorobenzene	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
1,2-Dichloroethane	ppm v/v	0.012	<0.0008	<0.0008	<0.019	<0.0008	<0.0008	<0.21	<1.9	<0.059	<0.0008	<0.002	<0.0021	<0.0018	<0.0045	<0.0008	<0.0008
1,2-Dichloropropane	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
1,3,5-Trimethylbenzene	ppm v/v	--	<0.0004	**0.0045**	<0.0096	**0.004**	**0.00032 J**	**0.18**	<0.96	**0.023 J**	**0.001**	**0.0041**	**0.0039**	**0.0013**	**0.0038**	<0.0004	<0.0004
1,3-Dichlorobenzene	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
1,4-Dichlorobenzene	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
2-Butanone (MEK)	ppm v/v	--	**0.0037**	**0.0019**	<0.019	**0.0039**	**0.0027**	<0.21	<1.9	<0.059	**0.0069**	**0.0046**	**0.0046**	**0.0017 J**	<0.0045	**0.00065 J**	**0.00042 J**
2-Hexanone	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	**3.7**	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
4-Ethyltoluene	ppm v/v	--	**0.00041**	**0.0095**	<0.0096	**0.0084**	**0.00054**	**0.29**	<0.96	**0.026 J**	**0.0019**	**0.0087**	**0.0087**	**0.0029**	**0.0084**	<0.0004	<0.0004
4-Methyl-2-pentanone (MIBK)	ppm v/v	--	<0.0004	**0.0059**	<0.0096	**0.0097**	**0.0037**	<0.11	<0.96	<0.03	**0.0037**	**0.0072**	**0.0069**	**0.0024**	**0.0089**	<0.0004	<0.0004
Acetone	ppm v/v	--	**0.018**	**0.0092**	<0.019	**0.015**	**0.012**	<0.21	<1.9	**0.1**	**0.027**	**0.024**	**0.025**	**0.009**	**0.0085**	<0.0008	<0.0008
Benzene	ppm v/v	0.011	**0.0057**	**0.039**	**0.035**	**0.11**	**0.072**	**0.21**	<0.72	**0.013 J**	**0.018**	**0.14**	**0.14**	**0.042**	**0.20**	<0.0003	<0.0003
Benzyl chloride	ppm v/v	--	<0.0008	<0.0008	<0.019	<0.0008	<0.0008	<0.21	<1.9	<0.059	<0.0008	<0.002	<0.0021	<0.0018	<0.0045	<0.0008	<0.0008
Bromodichloromethane	ppm v/v	--	<0.0003	<0.0003	<0.0072	<0.0003	<0.0003	<0.08	<0.72	<0.022	**0.00023 J**	<0.00076	<0.00078	<0.00066	<0.0017	<0.0003	<0.0003
Bromoform	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
Bromomethane	ppm v/v	--	<0.0008	<0.0008	<0.019	<0.0008	<0.0008	<0.21	<1.9	<0.059	<0.0008	<0.002	<0.0021	<0.0018	<0.0045	<0.0008	<0.0008
Carbon disulfide	ppm v/v	--	**0.0018**	**0.0086**	<0.019	**0.0015**	**0.001**	<0.21	<1.9	**0.041 J**	**0.014**	**0.0046**	**0.0046**	**0.0032**	**0.0067**	<0.0008	<0.0008
Carbon tetrachloride	ppm v/v	0.0039	<0.0008	<0.0008	<0.019	<0.0008	<0.0008	<0.21	<1.9	<0.059	<0.0008	<0.002	<0.0021	<0.0018	<0.0045	<0.0008	<0.0008
Chlorobenzene	ppm v/v	--	<0.0003	<0.0003	<0.0072	<0.0003	<0.0003	**0.19**	<0.72	**0.02 J**	<0.0003	<0.00076	<0.00078	<0.00066	<0.0017	<0.0003	<0.0003
Chloroethane	ppm v/v	--	<0.0008	<0.0008	<0.019	<0.0008	<0.0008	<0.21	<1.9	<0.059	**0.00045 J**	<0.002	<0.0021	**0.0026**	<0.0045	**0.00073 J**	**<0.0008**
Chloroform	ppm v/v	--	**0.0013**	**0.00055**	<0.0072	**0.00019 J**	**0.00014 J**	<0.08	<0.72	<0.022	**0.11**	**0.00051 J**	**0.00053 J**	**0.00043 J**	<0.0017	<0.0003	<0.0003
Chloromethane	ppm v/v	--	**0.00031 J**	**0.00031 J**	<0.019	**0.00035 J**	**0.00046 J**	<0.21	<1.9	<0.059	**0.00041 J**	**0.00056 J**	**0.00064 J**	<0.0018	<0.0045	<0.0008	<0.0008
cis-1,2-Dichloroethene	ppm v/v	3.9	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	**0.1 J**	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
cis-1,3-Dichloropropene	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
Dibromochloromethane	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
Dichlorodifluoromethane	ppm v/v	--	**0.00057**	**0.00048**	<0.0096	**0.00056**	**0.00067**	<0.11	<0.96	<0.03	**0.00052**	**0.00075 J**	**0.00069 J**	**0.00069 J**	<0.0022	**0.00063**	**<0.0004**
Ethylbenzene	ppm v/v	0.095	**0.0005**	**0.0086**	**0.0054 J**	**0.0068**	**0.00068**	**2.6**	<0.96	**0.084**	**0.0018**	**0.0067**	**0.0069**	**0.0024**	**0.0071**	<0.0004	<0.0004
Hexachlorobutadiene	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
m,p-Xylene	ppm v/v	72	**0.0016**	**0.031**	**0.022**	**0.025**	**0.0022**	**4.1**	<1.9	**0.32**	**0.0061**	**0.027**	**0.028**	**0.0098**	**0.026**	<0.0008	<0.0008

Table D-2
Sherwin-Williams Emeryville Remediation Project
SOIL GAS SAMPLE RESULTS - June 6 and 7, 2012

Chemical	Unit	Action Level	Soil Gas Monitoring Point (SGMP)													Ambient Condition	Trip Blank
			SGMP-01	SGMP-02	SGMP-03	SGMP-04	SGMP-05	SGMP-06	SGMP-07	SGMP-08	SGMP-09	SGMP-10	SGMP-10 Duplicate	SGMP-11	SGMP-12		
Methylene chloride	ppm v/v	--	<0.0004	**0.0041**	<0.0096	**0.0019**	**0.00028 J**	<0.11	<0.96	<0.03	**0.0034**	**0.00068 J**	**0.00063 J**	**0.00064 J**	**0.0022**	<0.0004	<0.0004
Naphthalene	ppm v/v	0.0060	**0.003**	<0.002	<0.048	**1.6 J**	<0.002	<0.53	<4.8	<0.15	<0.002	<0.005	<0.0052	<0.0044	<0.011	NR	<0.002
o-Xylene	ppm v/v	71	**0.00042**	**0.0088**	<0.0096	**0.008**	**0.00078**	**0.075 J**	<0.96	**0.095**	**0.0019**	**0.0091**	**0.0093**	**0.0035**	**0.0087**	<0.0004	<0.0004
Styrene	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
Tetrachloroethene	ppm v/v	0.026	**0.0015**	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
Toluene	ppm v/v	35	**0.0022**	**0.023**	**0.0097**	**0.025**	**0.0037**	**0.1 J**	<0.96	**1.1**	**0.0091**	**0.026**	**0.027**	**0.008**	**0.027**	**0.00020 J**	**<0.0004**
trans-1,2-Dichloroethene	ppm v/v	7.9	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
trans-1,3-Dichloropropene	ppm v/v	--	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
Trichloroethene	ppm v/v	0.097	<0.0004	<0.0004	<0.0096	<0.0004	<0.0004	<0.11	<0.96	<0.03	<0.0004	<0.001	<0.001	<0.00088	<0.0022	<0.0004	<0.0004
Trichlorofluoromethane	ppm v/v	--	**0.002**	**0.0073**	<0.0096	**0.0019**	**0.0011**	<0.11	<0.96	<0.03	**0.00048**	**0.01**	**0.01**	**0.033**	**0.002 J**	**0.00031 J**	**<0.0004**
Vinyl acetate	ppm v/v	--	<0.0008	<0.0008	<0.019	<0.0008	<0.0008	<0.21	<1.9	<0.059	<0.0008	<0.002	<0.0021	<0.0018	<0.0045	<0.0008	<0.0008
Vinyl chloride	ppm v/v	0.0051	<0.0002	<0.0002	<0.0048	<0.0002	<0.0002	<0.053	<0.48	<0.015	<0.0002	<0.0005	<0.00052	**0.0021**	<0.0011	<0.0002	<0.0002

Table D-2
Sherwin-Williams Emeryville Remediation Project
SOIL GAS SAMPLE RESULTS - June 6 and 7, 2012

Chemical	Unit	Action Level	Soil Gas Monitoring Point (SGMP)													Ambient Condition	Trip Blank
			SGMP-01	SGMP-02	SGMP-03	SGMP-04	SGMP-05	SGMP-06	SGMP-07	SGMP-08	SGMP-09	SGMP-10	SGMP-10 Duplicate	SGMP-11	SGMP-12		
Volatile Organic Compounds (VOCs) by TO-15 in ug/m3																	
1,1,1-Trichloroethane	ug/m3	991000	<1.6	**1.5 J**	<39	<1.6	<1.6	<440	<3900	<120	<1.6	<4.1	<4.3	<3.6	<9.1	NR	<1.6
1,1,2,2-Tetrachloroethane	ug/m3	--	<2.7	<2.7	<66	<2.7	<2.7	<730	<6600	<200	<2.7	<6.9	<7.2	<6.1	<15	NR	<2.7
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	--	**1.7 J**	<3.1	<74	<3.1	<3.1	<820	<7300	<230	<3.1	<7.7	<8.0	<6.8	<17	NR	<3.1
1,1,2-Trichloroethane	ug/m3	--	<2.2	<2.2	<52	<2.2	<2.2	<580	<5200	<160	<2.2	<5.5	<5.7	<4.8	<12	NR	<2.2
1,1-Dichloroethane	ug/m3	--	<1.2	<1.2	<29	<1.2	<1.2	<320	<2900	<90	<1.2	<3.1	<3.2	<2.7	<6.8	NR	<1.2
1,1-Dichloroethene	ug/m3	--	<3.2	<3.2	<76	<3.2	<3.2	<850	<7600	<230	<3.2	<8.0	<8.3	<7.0	<18	NR	<3.2
1,2,4-Trichlorobenzene	ug/m3	--	<19	<19	<450	<19	<19	<5000	<44000	<1400	<19	<47	<48	<41	<100	NR	<19
1,2,4-Trimethylbenzene	ug/m3	--	**3.5 J**	**56**	<290	**53**	**3.3 J**	**1900 J**	<29000	**170 J**	**16**	**63**	**61**	**20 J**	**55 J**	NR	<12
1,2-Dibromoethane (EDB)	ug/m3	--	<6.1	<6.1	<150	<6.1	<6.1	<1600	<15000	<450	<6.1	<15	<16	<14	<34	NR	<6.1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	--	<2.8	<2.8	<67	<2.8	<2.8	<750	<6700	<210	<2.8	<7.0	<7.3	<6.2	<16	NR	<2.8
1,2-Dichlorobenzene	ug/m3	--	<2.4	<2.4	<58	<2.4	<2.4	<640	<5700	<180	<2.4	<6.1	<6.3	<5.3	<13	NR	<2.4
1,2-Dichloroethane	ug/m3	49.6	<3.2	<3.2	<78	<3.2	<3.2	<860	<7700	<240	<3.2	<8.2	<8.5	<7.2	<18	NR	<3.2
1,2-Dichloropropane	ug/m3	--	<1.8	<1.8	<44	<1.8	<1.8	<490	<4400	<140	<1.8	<4.7	<4.8	<4.1	<10	NR	<1.8
1,3,5-Trimethylbenzene	ug/m3	--	<2.0	**22**	<47	**20**	**1.6 J**	**880**	<4700	**110 J**	**5.0**	**20**	**19**	**6.5**	**18**	NR	<2.0
1,3-Dichlorobenzene	ug/m3	--	<2.4	<2.4	<58	<2.4	<2.4	<640	<5700	<180	<2.4	<6.1	<6.3	<5.3	<13	NR	<2.4
1,4-Dichlorobenzene	ug/m3	--	<2.4	<2.4	<58	<2.4	<2.4	<640	<5700	<180	<2.4	<6.1	<6.3	<5.3	<13	NR	<2.4
2-Butanone (MEK)	ug/m3	--	**11**	**5.7**	<57	**11**	**7.9**	<630	<5600	<170	**20**	**14**	**14**	**5.0 J**	<13	NR	**1.2 J**
2-Hexanone	ug/m3	--	<1.6	<1.6	<39	<1.6	<1.6	<440	**15000**	<120	<1.6	<4.1	<4.3	<3.6	<9.1	NR	<1.6
4-Ethyltoluene	ug/m3	--	**2.0**	**47**	<47	**41**	**2.7**	**1400**	<4700	**130 J**	**9.3**	**43**	**43**	**14**	**42**	NR	<2.0
4-Methyl-2-pentanone (MIBK)	ug/m3	--	<1.6	**24**	<39	**40**	**15**	<440	<3900	<120	**15**	**30**	**28**	**9.9**	**36**	NR	<1.6
Acetone	ug/m3	--	**44**	**22**	<46	**36**	**29**	<510	<4500	**250**	**65**	**57**	**60**	**21**	**20**	NR	<1.9
Benzene	ug/m3	36.2	**18**	**120**	**110**	**350**	**230**	**660**	<2300	**40 J**	**57**	**440**	**460**	**130**	**620**	NR	<0.96
Benzyl chloride	ug/m3	--	<4.1	<4.1	<99	<4.1	<4.1	<1100	<9900	<310	<4.1	<10	<11	<9.2	<23	NR	<4.1
Bromodichloromethane	ug/m3	--	<2.0	<2.0	<48	<2.0	<2.0	<540	<4800	<150	**1.5 J**	<5.1	<5.2	<4.4	<11	NR	<2.0
Bromoform	ug/m3	--	<4.1	<4.1	<99	<4.1	<4.1	<1100	<9900	<310	<4.1	<10	<11	<9.1	<23	NR	<4.1
Bromomethane	ug/m3	--	<3.1	<3.1	<75	<3.1	<3.1	<830	<7400	<230	<3.1	<7.8	<8.1	<6.9	<17	NR	<3.1
Carbon disulfide	ug/m3	--	**5.7**	**27**	<60	**4.6**	**3.3**	<670	<6000	**130 J**	**44**	**14**	**14**	**10**	**21**	NR	<2.5
Carbon tetrachloride	ug/m3	25.1	<5.0	<5.0	<120	<5.0	<5.0	<1300	<12000	<370	<5.0	<13	<13	<11	<28	NR	<5.0
Chlorobenzene	ug/m3	--	<1.4	<1.4	<33	<1.4	<1.4	**870**	<3300	**94 J**	<1.4	<3.5	<3.6	<3.0	<7.7	NR	<1.4
Chloroethane	ug/m3	--	<2.1	<2.1	<51	<2.1	<2.1	<560	<5000	<160	**1.2 J**	<5.3	<5.5	**6.8**	<12	NR	<2.1
Chloroform	ug/m3	--	**6.4**	**2.7**	<35	**0.91 J**	**0.70 J**	<390	<3500	<110	**540**	**2.5 J**	**2.6 J**	**2.1 J**	<8.2	NR	<1.5
Chloromethane	ug/m3	--	**0.65 J**	**0.64 J**	<40	**0.73 J**	**0.94 J**	<440	<3900	<120	**0.85 J**	**1.2 J**	**1.3 J**	<3.7	<9.2	NR	<1.7
cis-1,2-Dichloroethene	ug/m3	15900	<1.6	<1.6	<38	<1.6	<1.6	**410 J**	<3800	<120	<1.6	<4.0	<4.1	<3.5	<8.8	NR	<1.6
cis-1,3-Dichloropropene	ug/m3	--	<1.8	<1.8	<44	<1.8	<1.8	<480	<4300	<130	<1.8	<4.6	<4.7	<4.0	<10	NR	<1.8
Dibromochloromethane	ug/m3	--	<3.4	<3.4	<82	<3.4	<3.4	<910	<8100	<250	<3.4	<8.6	<8.9	<7.5	<19	NR	<3.4
Dichlorodifluoromethane	ug/m3	--	**2.8**	**2.4**	<47	**2.7**	**3.3**	<530	<4700	<150	**2.6**	**3.7 J**	**3.4 J**	**3.4 J**	<11	NR	<2.0
Ethylbenzene	ug/m3	420	**2.2**	**37**	**24 J**	**29**	**2.9**	**11000**	<4200	**360**	**8.0**	**29**	**30**	**10**	**31**	NR	<1.7
Hexachlorobutadiene	ug/m3	--	<4.3	<4.3	<100	<4.3	<4.3	<1100	<10000	<320	<4.3	<11	<11	<9.4	<24	NR	<4.3
m,p-Xylene	ug/m3	317000	**6.7**	**140**	**96**	**110**	**9.7**	**18000**	<8300	**1400**	**26**	**120**	**120**	**43**	**110**	NR	<3.5

Table D-2
Sherwin-Williams Emeryville Remediation Project
SOIL GAS SAMPLE RESULTS - June 6 and 7, 2012

Chemical	Unit	Action Level	Soil Gas Monitoring Point (SGMP)													Ambient Condition	Trip Blank
			SGMP-01	SGMP-02	SGMP-03	SGMP-04	SGMP-05	SGMP-06	SGMP-07	SGMP-08	SGMP-09	SGMP-10	SGMP-10 Duplicate	SGMP-11	SGMP-12		
Methylene chloride	ug/m3	--	<1.4	**14**	<33	**6.8**	**0.98 J**	<370	<3300	<100	**12**	**2.4 J**	**2.2 J**	**2.2 J**	**7.6**	NR	<1.4
Naphthalene	ug/m3	31.9	**16**	<10	<250	**8.4 J**	<10	<2800	<25000	<780	<10	<26	<27	<23	<59	NR	<10
o-Xylene	ug/m3	315000	**1.8**	**38**	<42	**35**	**3.4**	**330 J**	<4200	**410**	**8.1**	**40**	**40**	**15**	**38**	NR	<1.7
Styrene	ug/m3	--	<1.7	<1.7	<41	<1.7	<1.7	<450	<4100	<130	<1.7	<4.3	<4.4	<3.8	<9.5	NR	<1.7
Tetrachloroethene	ug/m3	180	**9.9**	<2.7	<65	<2.7	<2.7	<720	<6500	<200	<2.7	<6.8	<7.1	<6.0	<15	NR	<2.7
Toluene	ug/m3	135000	**8.4**	**87**	**37**	**92**	**14**	**380 J**	<3600	**4100**	**34**	**99**	**100**	**30**	**100**	NR	<1.5
trans-1,2-Dichloroethene	ug/m3	31900	<1.6	<1.6	<38	<1.6	<1.6	<420	<3800	<120	<1.6	<4.0	<4.1	<3.5	<8.8	NR	<1.6
trans-1,3-Dichloropropene	ug/m3	--	<1.8	<1.8	<44	<1.8	<1.8	<480	<4300	<130	<1.8	<4.6	<4.7	<4.0	<10	NR	<1.8
Trichloroethene	ug/m3	528	<2.1	<2.1	<52	<2.1	<2.1	<570	<5100	<160	<2.1	<5.4	<5.6	<4.8	<12	NR	<2.1
Trichlorofluoromethane	ug/m3	--	**11**	**41**	<54	**10**	**6.2**	<600	<5400	<170	**2.7**	**57**	**58**	**180**	**11 J**	NR	<2.2
Vinyl acetate	ug/m3	--	<2.8	<2.8	<68	<2.8	<2.8	<750	<6700	<210	<2.8	<7.1	<7.4	<6.2	<16	NR	<2.8
Vinyl chloride	ug/m3	13.3	<0.51	<0.51	<12	<0.51	<0.51	<140	<1200	<38	<0.51	<1.3	<1.3	**5.5**	<2.9	NR	<0.51

Notes:

Samples collected on June 6 and 7, 2012.

Action Levels based on the following:

Lower and Upper Explosion Limit (LEL/UEL) for methane at 25 degrees Celsius.

Acceptable presence of helium (leak-test gas) without compromising sample integrity and representiveness of soil gas, per Cal/EPA Advisory - Active Soil Gas Investigation (April 2012).

California Human Health Screening Level (CHHSL) for VOCs in soil gas under residential use, where applicable, per Cal/EPA guidance document (January 2005, revised November 2009).

ppm = parts per million and v/v = volume over volume ratio

ug/m3 = micrograms per cubic meter

NR = not reported by laboratory

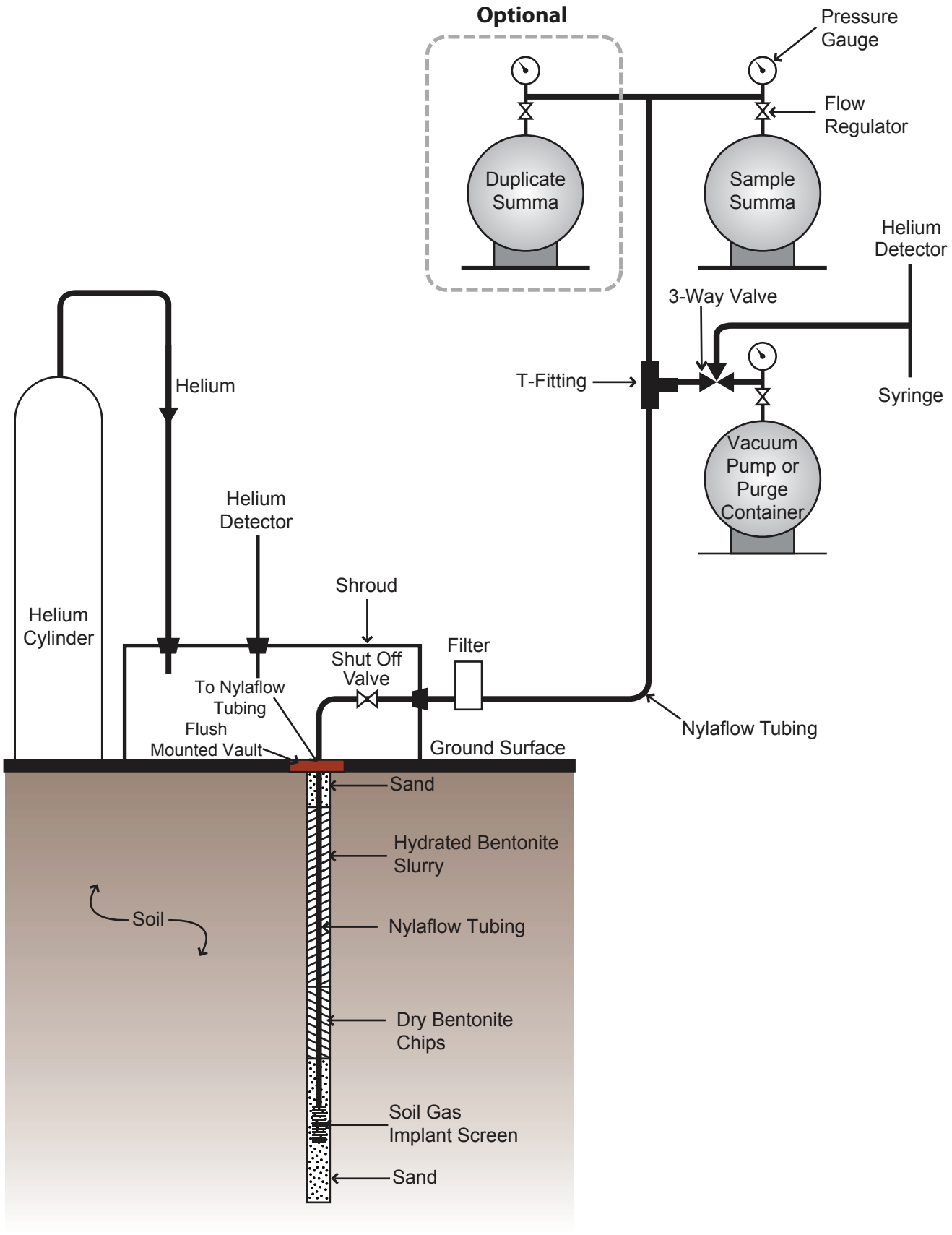
Bold indicates detection above method detection limit (MDL).

Detections below laboratory reporting limit (RL) presented with J flag preceding result.

Yellow highlight indicates detection above action level.

Grey highlight indicates reporting limit above action level for VOCs or methane detected above UEL.

Green highlight indicates detection above CHHSL under industrial/commercial use (0.039 ppm v/v, 122 ug/m3 for benzene and 0.32 ppm v/v, 1400 ug/m3 for ethylbenzene).



K:\GIS\13452_Sherwin-Williams\69712\OriginalData\Figure11-2_Soil Gas Sampling Schematic.ai 05/13/11 KAS

Figure D-1

Soil Gas Sampling Schematic

Sherwin-Williams Company - Emeryville, California

Attachment E

Health and Safety Plans

HEALTH AND SAFETY PLAN FORM *This document is for the exclusive* **CDM Smith**

CDM Smith Health and Safety Program *use of CDM Smith and its subcontractors* **PROJECT DOCUMENT #:**

PROJECT NAME	SW 1450 Sherwin	**PROJECT#**	13452-58958	**REGION**	NSG-COU
SITE ADDRESS	1450 Sherwin Street	**CLIENT ORGANIZATION**		The Sherwin Williams Company	
	Emeryville, CA	**CLIENT CONTACT**		Mr. Larry Mencin	
		CLIENT CONTACT PHONE #		(216) 566-1007	

( ) AMENDMENT TO EXISTING APPROVED H&SP?

( ) H&SP AMENDMENT NUMBER? **( ) DATE OF PREVIOUS H&SP APPROVAL**

OBJECTIVES OF FIELD WORK:
(e.g. collect surface soil samples):

1). Install and sample soil vapor wells with direct push
2). Sample and abandon soil vapor wells 3). Annual site visit

SITE TYPE: *Check as many as applicable*

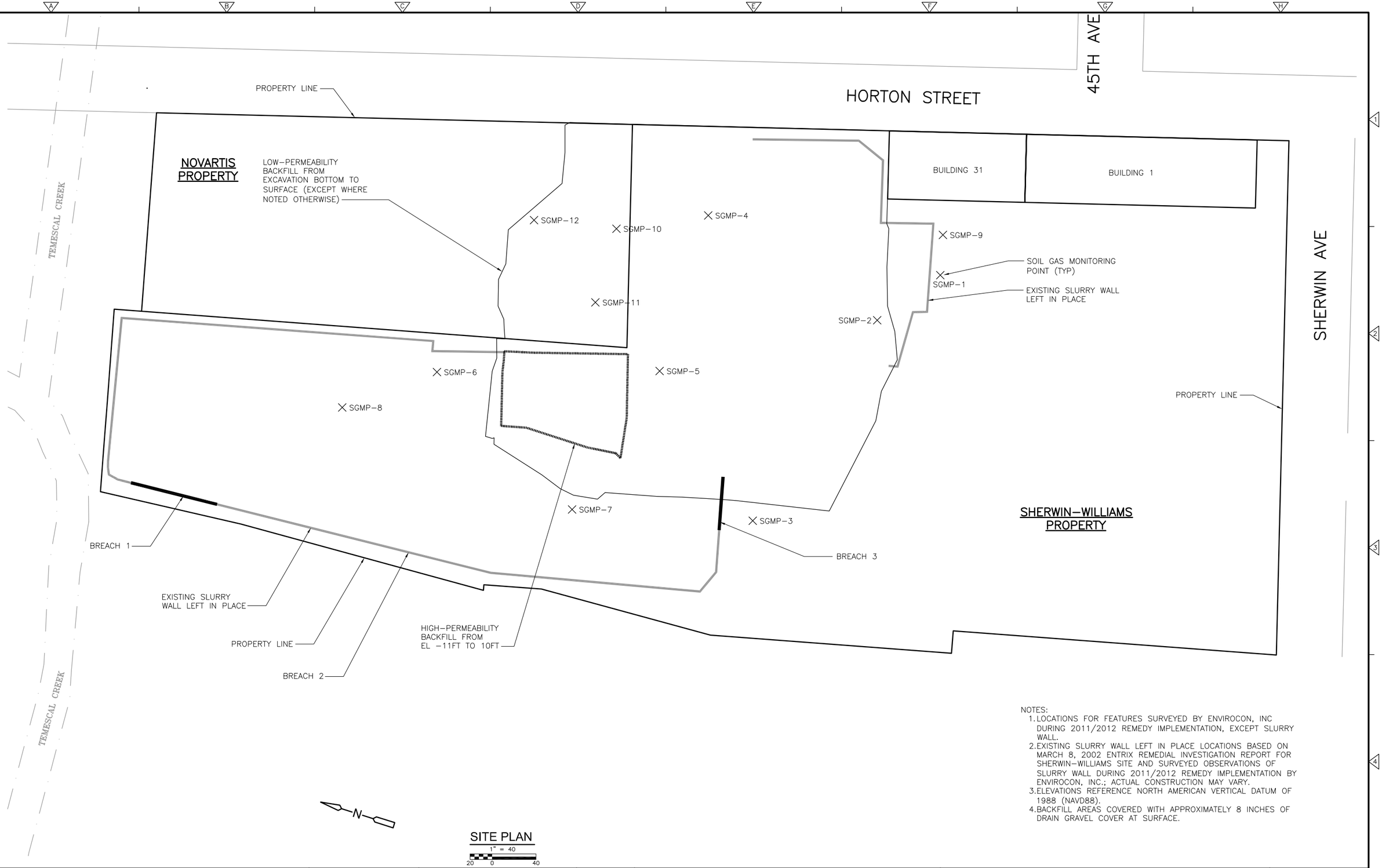
Active	()	Landfill	( )	Unknown	( )
Inactive	**(X)**	Uncontrolled	( )	Military	( )
Secure	**(X)**	Industrial	()	Other (specify)	
Unsecure	( )	Recovery	( )		
Enclosed space	( )	Well Field	( )		

All requirements described in the **CDM Health and Safety Manual** are incorporated in this health and safety plan by reference.

PERSONNEL AND RESPONSIBILITIES **NAMES OF WORK CREW MEMBERS**	**COMPANY or DIVISION**	**SUPERVISORY TRAINED?**	**PROJECT OR SITE RESPONSIBILITIES**	**Tasks On Site?**
Pawan Sharma	CDM Smith	C-S	Primary Site Technical Project Manager/Engineer Primary Site	1,2,3
Stefanie Mysel	CDM Smith	D	Site Geologist	1,2,3
Pawan Sharma	CDM Smith	C-S	Site Health and Safety Coordinator	1,2,3
Pawan Sharma	CDM Smith	C-S	Site Engineer	1.2.3

BACKGROUND REVIEW: (X) Complete ( ) Incomplete

© CDM SMITH ALL RIGHTS RESERVED.
REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM SMITH AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.



SITE PLAN
1" = 40
20 0 40

NOTES:
1. LOCATIONS FOR FEATURES SURVEYED BY ENVIROCON, INC DURING 2011/2012 REMEDY IMPLEMENTATION, EXCEPT SLURRY WALL.
2. EXISTING SLURRY WALL LEFT IN PLACE LOCATIONS BASED ON MARCH 8, 2002 ENTRIX REMEDIAL INVESTIGATION REPORT FOR SHERWIN-WILLIAMS SITE AND SURVEYED OBSERVATIONS OF SLURRY WALL DURING 2011/2012 REMEDY IMPLEMENTATION BY ENVIROCON, INC.; ACTUAL CONSTRUCTION MAY VARY.
3. ELEVATIONS REFERENCE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4. BACKFILL AREAS COVERED WITH APPROXIMATELY 8 INCHES OF DRAIN GRAVEL COVER AT SURFACE.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: X
DRAWN BY: X
SHEET CHK'D BY: X
CROSS CHK'D BY: X
APPROVED BY:
DATE: MAY 2012

CDM Smith
100 Pringle Avenue, Suite 300
Walnut Creek, CA 94596
Tel: (925) 933-2900

VERIFY SCALE
THIS BAR IS ONE INCH LONG AT FULL SCALE

SHERWIN-WILLIAMS COMPANY

SITE REMEDIATION
EMERYVILLE, CALIFORNIA

SOIL GAS MONITORING POINTS

PROJECT NO. 13452-81494
FILE NAME: sw as-built1a.dwg
SHEET NO.

HISTORY: *Summarize conditions that relate to hazard. Include citizen complaints, spills, previous investigations or agency actions, known injuries, etc.*

Sherwin-Williams began operations at the Site in 1919. Coating products were manufactured since operations began, but also included the production of lead-arsenate pesticides from the 1920s until 1948. Sherwin-Williams produced oil-based paints until 1987 and has since only produced water-based coating materials until 2009 when the facility was decommissioned. A slurry wall was installed around the source area of lead-arsenate contamination on the Sherwin-Williams property in 1980s. Groundwater extraction wells were installed within the slurry wall to prevent contaminated groundwater from migrating downgradient. Groundwater is treated at the on-site treatment facility and then discharged to Temescal Creek. Contamination from the upgradient former Shell Development property, underground storage tanks from the downgradient former Southern Pacific Railroad also contribute to groundwater and soil contamination at the Site. In 2011/2012, the agency approved remedial action was implemented at the site.

WASTE TYPES: (X) Liquid (X) Solid ( ) Sludge ( ) Gas ( ) Unknown ( ) Other, specify:

WASTE CHARACTERISTICS: *Check as many as applicable.*

( ) Corrosive () Flammable ( ) Radioactive

(X) Toxic **(X) Volatile** ( ) Reactive
( ) Inert Gas ( ) Unknown
( ) Other: _____

WORK ZONES:

The entire Site will be considered a work area and all PPE will be required with the fenced area. Specific work zones will be based on location of boring. When drilling, the exclusion zone (CRZ) is 1.5X the mast height of the drill rig. The contamination reduction zone is along the perimeter of the exclusion zone at the inside edge of the fenced work area. All protective equipment will be removed in the CRZ.

HAZARDS OF CONCERN: *Check as many as applicable.*

(X) Heat Stress CDM Guideline **(X) Noise** CDM Guideline
( ) Cold Stress CDM Guideline **(X) Inorganic Chemicals**
(X) Explosive/Flammable ( ) Organic Chemicals
( ) Oxygen Deficient ( ) Motorized Traffic
( ) Radiological **(X) Heavy Machinery**
(X) Biological ticks **(X) Slips & Falls** CDM Guideline

FACILITY'S PAST AND PRESENT DISPOSAL METHODS AND PRACTICES:

Soil produced during installation of wells will be containerized in 55-gallon drums. Soil will be characterized and disposed offsite.

This plan incorporates CDM's procedure for: *(Click on the relevant topics to download the hazard guideline. Delete irrelevant topics.)*

Housekeeping | Traffic and Work Zone Safety | Tools and Power Equipment
Working Around Heavy Equipment | Hazardous Waste Site Controls
Hazardous Waste Site Decontamination | Working Safely Around Drill Rigs

HEALTH AND SAFETY PLAN FORM	*This document is for the exclusive*	**CDM Smith**	
CDM Smith Health and Safety Program	*use of CDM Smith and its subcontractors*	**PROJECT DOCUMENT #:**	0

DESCRIPTION AND FEATURES: *Include principal operations and unusual features (containers, buildings, dikes, power lines, hillslopes, rivers, etc.)*

The site is occupied by two building associated with past operations of manufacturing paints, pigments, and pesticides. Subsequent to demolition activities that concluded in late November 2007 and cleanup activities that concluded in April 2012, the property is now covered by asphalt/concrete paved areas and gravel cover areas. Paved area are mainly foundations for several demolished buildings. The former Rifkin property is located along the western side of Horton Street, adjacent to the north and east of portions of the S-W property. The portion of the former Rifkin property included as part of the Site is currently covered by asphalt and serves as a parking lot.

SURROUNDING POPULATION: (X) Residential ( ) Industrial (X) Commercial ( ) Rural ( ) Urban OTHER:

HAZARDOUS MATERIAL SUMMARY: ***Highlight or bold waste types and estimate amounts by category.***

CHEMICALS: *Amount/Units:*	**SOLIDS:** *Amount/Units:*	**SLUDGES:** *Amount/Units:*	**SOLVENTS:** *Amount/Units:*	**OILS:** *Amount/Units:*	**OTHER:** *Amount/Units:*
Acids	Flyash	Paints	Ketones	**Oily Wastes**	Laboratory
Pickling Liquors	Mill or Mine Tailings	Pigments	Aromatics	**Gasoline**	Pharmaceutical
Caustics	Asbestos	Metals Sludges	Hydrocarbons	**Diesel Oil**	Hospital
Pesticides	Ferrous Smelter	POTW Sludge	Alcohols	Lubricants	Radiological
Dyes or Inks	Non-Ferrous Smelter	Distillation Bottoms	**Halogenated (chloro, bromo)**	Polynuclear Aromatics	Municipal
Cyanides	**Metals**	Aluminum	Esters	PCBs	Construction
Phenols	Dioxins		Ethers	Heating Oil	Munitions
Halogens					
Other - *specify*	Other - *specify*	Other - *specify*	Other - *specify*	Other - *specify*	Other - *specify*
	Perchlorate		**Non-halogenated**		**Arsenic**

HEALTH AND SAFETY PLAN FORM	*This document is for the exclusive*	CDM Smith	
CDM Smith Health and Safety Program	*use of CDM Smith and its subcontractors*	PROJECT DOCUMENT #:	0

KNOWN CONTAMINANTS	HIGHEST OBSERVED CONCENTRATION	PEL/TLV *ppm or mg/m3* *(specify)*	IDLH *ppm or mg/m3* *(specify)*	Warning Concentration *(in ppm)*	SYMPTOMS & EFFECTS OF ACUTE EXPOSURE	PHOTO IONIZATION POTENTIAL

PLEASE SEE ATTACHED WORD FILE FOR THIS INFORMATION

*** State of California Public Health goal**

NA = Not Available **NE = None Established** **U = Unknown**

Verify your access to an MSDS for each chemical you will use at the site.

Carc. = Carcinogenic

S = Soil SW = Surface Water T = Tailings W = Waste TK = Tanks SD = Sediment

A = Air GW = Ground Wate SL = Sludge D = Drums L = Lagoons OFF = Off-Site

KNOWN OR POTENTIAL CONTAMINANTS	HIGHEST OBSERVED CONCENTRATION IN SHALLOW GROUNDWATER	HIGHEST OBSERVED CONCENTRATION IN SHALLOW SOIL	PEL/TLV ppm or mg/m^3 *(specify)*	IDLH ppm or mg/m^3 *(specify)*	SYMPTOMS/EFFECTS OF ACUTE EXPOSURE	Photo Ionization Potential (eV)
Chemicals of Concern most likely encountered in air as respirable dust and organic vapor						
Arsenic	820 mg/L	13,000 mg/kg	10 µg/m^3	5 mg/m^3	Nasal ulcers, fever, bronchitis, melanosis, peripheral neuropathy, dermatitis gastrointestinal disturbances, respiratory irritation	Dust
Lead	0.15 mg/L	500 mg/kg	50 µg/m^3	100 mg/m^3	Pallor, colic, insomnia, lassitude (weakness, exhaustion), constipation, abdominal pain, irritation of eyes	Dust
1,2,4-Trimethylbenzene	620 ug/L (0.620ppm)	0.95 mg/kg	25 ppm	NE	Eye, skin, nose & throat & respiratory system irritation, pneumonia; bronchitis; hypochromatic anemia; headache, drowsiness, lassitude, dizziness, nausea, incoordination; vomit, confusion	NA
1,3,5-Trimethylbenzene	190 ug/L (0.190ppm)	0.23	25 ppm	NE	Eye, skin, nose & throat & respiratory system irritation, pneumonia; bronchitis; hypochromatic anemia; headache, drowsiness, lassitude, dizziness, nausea, incoordination; vomit, confusion	NA
1,2 Dichloroethane (Ethylened dichloride)	240 ug/L (0.240ppm)	NA	50 ppm	26 ppm	Irritated skin, eyes, corneal opacity; nausea, vomit; dermatitis; CNS depression; liver, kidney, lung damage	11.05
Benzene	950 ug/L (0.950ppm)	0.02 mg/kg	0.5 ppm	500 ppm	Irritated skin, eyes, nose, respiratory system; dizziness; headache, nausea, staggered gait; anorexia, lassitude, dermatitis; CNS depression; liver, kidney, lung damage	9.25
Ethylbenzene	9,800 ug/L (9.80ppm)	140 mg/kg	100 ppm	800 ppm	Irritated skin, eyes, mucous membrane; headache, dermatitis, narcosis, coma; CNS depression; liver, kidney, lung damage	9.25
Tetrachloroethene	45,000 ug/L (45.0ppm)	NA	25 ppm	150 ppm	Irritated eyes, nose, throat, skin, and respiratory system; nausea; incoordination, headache, drowsiness; skin erythema; flushed face & neck, dizziness	8.76

Toluene (skin)	330,000 ug/L (330ppm)	270 mg/kg	50 ppm	500 ppm	Irritated skin, eyes, nose; lassitude, confusion, euphoria, dizziness, headache; dilated pupils, lacrimation; anxiety, muscle fatigue, insomnia; paresthesia, dermatitis; CNS depression; liver, kidney, lung damage	8.82
Trichloroethene	8,200 ug/L (8.20ppm)	NA	50 ppm	1,000 ppm	Irritation in eyes, skin; lassitude, dizziness, tremor, nausea, vomit; dermatitis; cardiac arrhythmias, paresthesia; liver injury; vertigo, visual disturbance, headache, drowsiness	9.45
Vinyl Chloride *	17 ug/L (0.017ppm)	NA	1 ppm	NE	Lassitude;gastrointestinal bleeding; enlarged liver; pallor or cyanosis of extremities; frostbite (liquid), abdominal pain, CNS depression	10.00
Xylenes (total)	210,000 ug/L	580 mg/kg	100 ppm	900 ppm	Irritated skin, eyes, nose, throat; dizziness, excitement, drowsiness, incoordination, staggering gait; corneal vacuolization; anorexia, nausea, vomit, abdominal pain; dermatitis CNS depression; liver, kidney, lung damage	8.44
Other Chemicals of Concern at site						
Beryllium	0.01 mg/L	0.69 mg/kg	2 µg/m^3	4 mg/m^3	Respiratory symptoms, weakness, weight loss	Dust
Cadmium	0.42 mg/L	11 mg/kg	5 µg/m^3	9 mg/m^3	Pulmonary edema, tight chest, chills	Dust
Copper	2.10 mg/L	383 mg/kg	1 mg/m^3	NE	Nasal perforation, metal taste	Dust
Iron	1,200 mg/L	NA	5 mg/m^3	2,500 mg/m^3	Benign pneumoconiosis, cough	Dust
Manganese	88 mg/L	NA	0.2 mg/m^3	500 mg/m^3	"Dead face", dry throat, cough metal fume fever, pneumonia	Dust
Nickel	2.03 mg/L	110 mg/kg	1 mg/m^3	10 mg/m^3	Skin sensitivity, chest pain, "asthma"	Dust
Thallium	0.15 mg/L	0.87 mg/kg	100 µg/m^3	15 mg/m^3	Nausea, diarrhea, stomach pain	NA
Zinc	230 mg/L	53,000 mg/kg	5 mg/m^3	NE	Sweet metal taste, dry throat, cough, tight chest, chills	Dust
1,1,2,2-Tetrachloroethane	18 ug/L (0.018ppm)	NA	100 ppm	150 ppm	Irritated eyes, nose, throat, flushed face and neck, dizziness	9.32

1,2-Dichloropropane	270 ug/L (0.270ppm)	NA	75 ppm	400 ppm	Eye irritation, drowsiness, lightheadedness	10.87
2-Butanone	1,700 mg/L	NA	200 ppm	3,000 ppm	Irritated eyes, dizziness, vomiting	9.53
Acetone	2,500 mg/L	0.28 mg/kg	500 ppm	2,500 ppm	Irritated eyes, headache, dizziness	9.69
Carbon Tetrachloride	290 ug/L (0.290ppm)	NA	2 ppm	200 ppm	Central nervous system depression, nausea, liver damage	11.5
Chloroform	270 ug/L (0.270ppm)	NA	2 ppm	500 ppm	Mental dullness, headaches, anesthesia, dizziness	11.4
1,2-Dichloroethene (cis)	100 ug/L (0.100ppm)	NA	200 ppm	1,000 ppm	Irritated eyes, CNS depression	10
Methyl Tert Butyl Ether	22 ug/L (0.022ppm)	NA	40 ppm	NE	Drowsiness, eye irritation, incoordination, rapid breathing	<9.40
o-Xylenes	4,400 ug/L (4.40ppm)	NA	100 ppm	900 ppm	Eye, nose & throat irritation, drowsiness, nausea, incoordination	8.44
1,2 Dichloroethene (trans)	100 ug/L (0.100ppm)	NA	200 ppm	1000 ppm	Irritated skin, CNS depression; liver, kidney, lung damage	9.65
4-Methylphenol	1,000 ug/L (1.00ppm)	NA	5 ppm	250 ppm	Skin corrosive, eye irritant, muscle aches, dark urine	8.5
Acenaphthene	390 ug/L (0.390ppm)	NA	0.20 ppm	NE	Irritant to eyes, skin, throat; coughing, wheezing, vomiting	
Naphthalene	650 ug/L (0.650ppm)	10 mg/kg	10 ppm	250 ppm	Eye irritation, headache, confusion, excitement, nausea	8.12
TPH (diesel)	1,900 mg/L	71 mg/kg	300 ppm	NE	Vomiting, diarrhea, insomnia, dizziness, headache	NA
TPH (gasoline)	1,900 mg/L	300 mg/kg	300 ppm	NE	Vomiting, diarrhea, insomnia, dizziness, headache	NA

NA = Not Available
S = Soil
A = Air
L = Lagoon
* = Suspected Carcinogen

NE = None Established
SW = Surface Water
SL = Sludge
FL = Fly ash

U = Undetected
GW = Ground Water
D = Drums
T = Tailings

TK = Tanks
mg/L = milligram per liter
ug/L = microgram per liter

PEL = Permissible Exposure Limit
TLV = Threshold Limit Value
IDLH = Immediately Dangerous to Life and Health
mg/m^3 = milligram per cubic meter
ppm = parts per million

HEALTH AND SAFETY PLAN FORM CDM Smith Health and Safety Program	*This document is for the exclusive use of CDM Smith and its subcontractors*	CDM Smith PROJECT DOCUMENT #: 0	
SPECIFIC TASK DESCRIPTIONS	**Disturbing the Waste?**	**TASK - SPECIFIC HAZARDS**	**HAZARD & SCHEDULE**
1 Install and sample soil vapor wells	**Intrusive** Non-intrusive	Noise, slips, trips, and falls, heavy equipment operation, mechanical injuries, heat stress, biological hazards, contact with contaminants	Low Hazard Spring
2 Sample and abandon soil vapor wells	**Intrusive** Non-intrusive	Noise, slips, trips, and falls, heavy equipment operation, mechanical injuries, heat stress, biological hazards, contact with contaminants	Low Hazard Fall
3 Annual Site visit	Intrusive **Non-intrusive**	Slips, trips, and falls, heat stress, biological hazards	Low Hazard TBD
SPECIALIZED TRAINING REQUIRED: **None**		**SPECIAL MEDICAL SURVEILLANCE REQUIREMENTS:** **None**	
OVERALL HAZARD EVALUATION: ( ) High ( ) Medium (X) Low ( ) Unknown *(Where tasks have different hazards, evaluate each.)* **JUSTIFICATION:** Appropriate work practices and monitoring to be used during intrusive activities. PPE will be upgraded if necessary.			
FIRE/EXPLOSION POTENTIAL: ( ) High ( ) Medium (X) Low ( ) Unknown			

PROTECTIVE EQUIPMENT: *Specify by task. Indicate type and/or material, as necessary. Group tasks if possible. Use copies of this sheet if needed.*

BLOCK A

TASKS: 1,2,3
LEVEL: **D**
(X) Primary ( ) Contingency

Respiratory: **(X) Not needed**
( ) SCBA, Airline:
( ) APR:
( ) Cartridge:
( ) Escape Mask:
( ) Other:

Head and Eye: ( ) Not needed
(X) Safety Glasses:
( ) Face Shield:
( ) Goggles:
(X) Hard Hat:
( ) Other:

Boots: ( ) Not needed
(X) Steel-Toe ( ) Steel Shank
( ) Rubber **(x) Leather**
( ) Overboots:

Prot. Clothing: ( ) Not needed
( ) Encapsulated Suit:
( ) Splash Suit
( ) Apron:
( ) Tyvek Coverall
( ) Saranex Coverall
( ) Cloth Coverall:
(X) Other: Work clothes

Gloves: ( ) Not needed
(X) Undergloves: Nitrile
( ) Gloves:
( ) Overgloves:

( ) Other: specify below

(X) Sun screen
(X) Hearing protection
(X) Safety Vest
( ) Flotation Device

BLOCK B

TASKS: 1,2,3
LEVEL: **C**
( ) Primary **(X) Contingency**

Respiratory: ( ) Not needed
( ) SCBA, Airline:
(X) APR: Full or Half Face
(X) Cartridge:
( ) Escape Mask:
( ) Other:

Head and Eye: ( ) Not needed
(X) Safety Glasses:
( ) Face Shield:
( ) Goggles:
(X) Hard Hat:
( ) Other:

Boots: ( ) Not needed
(X) Steel-Toe ( ) Steel Shank
( ) Rubber **(X) Leather**
( ) Overboots: Latex

Prot. Clothing: ( ) Not needed
( ) Encapsulated Suit:
( ) Splash Suit
( ) Apron:
(X) Tyvek Coverall
( ) Saranex Coverall
( ) Cloth Coverall:
( ) Other:

Gloves: ( ) Not needed
(X) Undergloves: Nitrile
( ) Gloves:
( ) Overgloves:

Other: specify below

(X) Sun screen
(X) Hearing protection
(X) Bug repellant
( ) Flotation Device

BLOCK C

TASKS: 1 - 2 - 3
LEVEL: **LEAVE SITE**
( ) Primary **(X) Contingency**

Respiratory: ( ) Not needed
( ) SCBA, Airline:
( ) APR:
( ) Cartridge:
( ) Escape Mask:
( ) Other:

Head and Eye: ( ) Not needed
( ) Safety Glasses:
( ) Face Shield:
( ) Goggles:
( ) Hard Hat:
( ) Other:

Boots: ( ) Not needed
( ) Steel-Toe ( ) Steel Shank
( ) Rubber ( ) Leather
( ) Overboots:

Prot. Clothing: ( ) Not needed
( ) Encapsulated Suit:
( ) Splash Suit
( ) Apron:
( ) Tyvek Coverall
( ) Saranex Coverall
( ) Cloth Coverall:
( ) Other:

Gloves: ( ) Not needed
( ) Undergloves:
( ) Gloves:
( ) Overgloves:

Other: specify below

LEAVE SITE

BLOCK D

TASKS: 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10
LEVEL: A - B - C - D - Modified
( ) Primary ( ) Contingency

Respiratory: ( ) Not needed
( ) SCBA, Airline:
( ) APR:
( ) Cartridge:
( ) Escape Mask:
( ) Other:

Head and Eye: ( ) Not needed
( ) Safety Glasses:
( ) Face Shield:
( ) Goggles:
( ) Hard Hat:
( ) Other:

Boots: ( ) Not needed
( ) Steel-Toe ( ) Steel Shank
( ) Rubber ( ) Leather
( ) Overboots:

Prot. Clothing: ( ) Not needed
( ) Encapsulated Suit:
( ) Splash Suit
( ) Apron:
( ) Tyvek Coverall
( ) Saranex Coverall
( ) Cloth Coverall:
( ) Other:

Gloves: ( ) Not needed
( ) Undergloves:
( ) Gloves:
( ) Overgloves:

Other: specify below

( ) Tick Spray
( ) Flotation Device
( ) Hearing Protection
( ) Sun Screen

This health and safety plan form constitutes hazard analysis per 29 CFR 1910.132

HEALTH AND SAFETY PLAN FORM		This document is for the exclusive		CDM Smith	
CDM Smith Health and Safety Program		use of CDM Smith and its subcontractors		PROJECT DOCUMENT #:	0
MONITORING EQUIPMENT:		Specify by task. Indicate type as necessary. Attach additional sheets if needed.			
INSTRUMENT	TASK	ACTION GUIDELINES		COMMENTS	
Combustible		0-10% LEL	*No explosion hazard*		(X) Not Needed
Gas Indicator	1-2-3-4-5-6-7-8	10-25% LEL	*Potential explosion hazard; notify SHSC*		
		>25% LEL	*Explosion hazard; interrupt task/evacuate*		
		21.0% O2	*Oxygen normal*		
		<21.0% O2	*Oxygen deficient; notify SHSC*		
		<19.5% O2	*Interrupt task/evacuate*		
Radiation		3 x Background:	*Notify HSM*		(X) Not Needed
Survey Meter	1-2-3-4-5-6-7-8	>2mR/hr:	*Establish REZ*		
5 Gas Multi Gas		*Specify:*			**Needed**
Detector	**1,2**	0-10% LEL	*No explosion hazard*		
__10.6___eV Lamp		10-25% LEL	*Potential explosion hazard; notify SHSC*	**Will be on site during soil vapor installation, sampling and abandonment.**	
Type ___MultiRae 2000_		>25% LEL	*Explosion hazard; interrupt task/evacuate*		
		21.0% O2	*Oxygen normal*		
		<21.0% O2	*Oxygen deficient; notify SHSC*		
		<19.5% O2	*Interrupt task/evacuate*		
		<1 ppm VOC	*Continue work in level D ppe*		
		>1 ppm VOC	*Stop work and determine if need to up grade ppe*		
Flame Ionization		*Specify:*			(X) Not Needed
Detector	1-2-3-4-5-6-7-8				
Type_____					
Single Gas		*Specify:*			(X) Not Needed
	1-2-3-4-5-6-7-8				
Type_____					
Type_____					
Respirable		*Specify:*			(X) Not Needed
Dust Monitor	1-2-3-4-5-6-7-8				
Type_____					
Type_____					
Other		*Specify:*			( ) Not Needed
Specify:	1-2-3-4-5-6-7-8				
Type_____					
Type_____					
Other		*Specify:*			**Needed**
			Stop work if visible dust can't be controlled		
Specify: **DUST**	**1,2**			**Control all visible dust**	
Type_____					
Type_____					

DECONTAMINATION PROCEDURES

ATTACH SITE MAP INDICATING EXCLUSION, DECONTAMINATION, & SUPPORT ZONES AS PAGE TWO

Personnel Decontamination	**Sampling Equipment Decontamination**	**Heavy Equipment Decontamination**
Summarize below or attach diagram;	*Summarize below or attach diagram;*	*Summarize below or attach diagram;*
Team members will remove their protective clothing in the following order: # Equipment drop # Hard hat removal # Glove removal # Hand and face wash # Shower as soon as possible ( ) Not Needed	Decontamination of sampling equipment will consist of a soap /tap water wash, tap water rinse and deionized water rinse. ( ) Not Needed	Digging and Drilling equipment will be decontaminated by steam cleaner on the drill rig. ( ) Not Needed
Containment and Disposal Method	**Containment and Disposal Method**	**Containment and Disposal Method**
Wash water will not be contained.	Wash water will be contained in 55-gallon drum.	Residual drill cuttings and decon water will be contained in 55-gallon drums for characterization and offsite disposal.

HAZARDOUS MATERIALS TO BE BROUGHT ONSITE

Preservatives		*Decontamination*		*Calibration*	
( ) Hydrochloric Acid	( ) Zinc Acetate	(X) Alconox TM	( ) Hexane	( ) 100 ppm isobutylene	( ) Hydrogen Sulfide
( ) Nitric Acid	( ) Ascorbic Acid	( ) Liquinox TM	( ) Isopropanol	( ) Methane	( ) Carbon Monoxide
( ) Sulfuric Acid	( ) Acetic Acid	( ) Acetone	( ) Nitric Acid	( ) Pentane	( ) pH Standards
( ) Sodium Hydroxide	( ) Other:	( ) Methanol	( ) Other:	( ) Hydrogen	( ) Conductivity Std
		( ) Mineral Spirits		( ) Propane	( ) Other:

HEALTH AND SAFETY PLAN FORM *This document is for the exclusive* **CDM Smith**

CDM Smith Health and Safety Program *use of CDM Smith and its subcontractors* **PROJECT DOCUMENT #:** 0

EMERGENCY CONTACTS

Water Supply	N/A
Site Telephone Autodialer	510-420-7200
EPA Release Report #:	800 / 424 - 8802
CDM 24-Hour Emergency #:	CED 732 / 539 - 8128
Facility Management	
Other (specify) CAL-OSHA	N/A
CHEMTREC Emergency #:	800 / 424 - 9300

SAFETY NARRATIVE: *Summarize below*

CDM Smith shall ensure utility locates are performed prior to intrusive activities. Drilling and sampling personnel shall also be closely monitored for cleanliness duruing activities. If soil or water is observed on work clothing, the SSO will direct the workers to don Tyvek or similar disposable protective clothing.

Emergency Response Plan (ERP)

Prior to start of task activities, this plan will be discussed and signed by each person working at the Site. Site information, associated hazards, intended work and emergency procedures will be presented.

Two people will be present onsite during task activities. In the event of personnel injury, the uninjured person will direct emergency activities and implementation of the ERP.

In an event of a life threatening injury where there is insufficient time to wait for an ambulance, the field vehicle will be used to transport the injured personnel to the Kaiser Foundation Hospital (280 West Macarthur Boulevard, Oakland, CA).

If additional emergency personnel must be summoned to the Site the southeast corner of the site (entrance to building) will be used as the contact area.

A first aid kit will be available onsite for minor injuries, (i.e., scrapes, cuts, etc.) Call 911 for other emergencies.

Reporting of incidents to pertinent local, state, and federal agencies will be performed by appropriate CDM Smith representatives after report by field personnel. Review and follow up will be directed by said CDM Smith representatives.

No additional emergency or PPE will be kept at the Site for emergencies nor will emergency personnel require PPE during emergency response.

Emergency services will be contacted by cellular telephone.

Local Emergency Contacts

Pre-activity meetings with local officials and/or other local emergency and public safety agencies (e.g., fire, police, and local health officials) is not necessary. Coordination with these agencies will be carried out during emergencies only.

Contacting the local medical facility prior to commencement of work will not be necessary for remedial action activities. Map to hospital is attached. Assembly areas are not required as all personnel onsite will be together at all times.

Emergency decontamination of injured workers will not vary from normal decontamination procedures. Nitrile gloves will be removed. Hands and face may be washed once the injured worker has reached the emergency facility.

HEALTH AND SAFETY PLAN APPROVALS (H&S Mgr must sign each plan)

Prepared by	Stefanie Mysel	Date	5/23/2012
HSC Signature		Date	
HSM Signature		Date	5/29/12

EMERGENCY CONTACTS	NAME	PHONE
Health and Safety Manager	Paul Opem	(303) 383-2483
Project Manager	Pawan Sharma	(925) 296-8074
Site Safety Coordinator	Pawan Sharma	(925) 296-8074
Client Contact	Mr. Larry Mencin	(216) 566-1007
Site Contact	Luis Banaag	(510) 420-7200
Environmental Agency		
State Spill Number	California	(800) 852-7550
Fire Department		911
Police Department		911
State Police		911
Health Department		
Poison Control Center	Nationwide	800 / 222 - 1222
Occupational Physician	Dr. Jerry Berke	800 / 350-4511

MEDICAL EMERGENCY		PHONE
Hospital Name:	Foundatio	(510) 752-1000
Hospital Address	280 West Macarthur Blvd, Oakland, CA 94611	
Name of Contact at Hospital:	N/A	
Name of 24-Hour Ambulance:	Emergency	911
Route to Hospital:	see attached map	

Head east on Sherwin St. to Horton Street. (161 feet), turn right on Horton St. (0.2 mi), turn left on 40th St. (0.8 mi), turn right on Market St. (0.2 mi), turn left at W. Macarthur Blvd. (0.9 mi), arrive at 280 W. Macarthur Blvd.

Distance to Hospital 2.1 miles (10 minutes)

16.12 Tools and Power Equipment

16.12.1 Hand Tools

CDM Smith employees who have a need to use basic hand tools should use the following work practices:

- All tools used on CDM Smith projects, regardless of ownership, shall be of an approved type and maintained in good condition. Tools are subject to inspection at any time. The project manager has the authority and responsibility to condemn unserviceable tools, regardless of ownership.
- Tag defective tools to prevent their use or removal from the job site.
- Use the proper tool for the job performed.
- Do not use hammers with metal handles, screwdrivers, knives with metal continuing through the handle, and metallic measuring tapes on or near energized electrical circuits or equipment.
- Do not throw tools from place to place or from person to person. Tools that must be raised or lowered from one elevation to another shall be placed in tool buckets or firmly attached to hand lines.
- Do not place tools unsecured on elevated places.
- Dress, repair, or replace all impact tools such as chisels, punches, drift pins, etc., that become mushroomed or cracked before further use.
- Use suitable holders or tongs, not the hands, to hold chisels, drills, punches, ground rods, or pipes that are struck by another employee.
- Do not use shims to make a wrench fit.
- Do not use wrenches with sprung or damaged jaws.
- Do not use pipe or other means to extend a wrench handle for added leverage unless the wrench was designed for such use.
- Use tools only for the purposes for which they have been designed.
- Store and handle tools with sharp edges so that they will not cause injury or damage. They shall not be carried in pockets.
- Use eye protection when using or working around impact type tools (e.g., hammer, chisel, ax, hatchet, etc.).
- Replace wooden handles that are loose, cracked, or splintered. The handle shall not be taped, glued, or lashed with wire.

- Keep all cutting tools such as saws, wood chisels, knives, or axes in suitable guards or in special compartments.

- When using such tools as screwdrivers and wrenches, avoid using your wrists in a bent, flexed, extended, or twisted position for long periods of time. Employees should maintain their wrists in a neutral or straight position.

- Do not leave tools lying around where they may cause a person to trip or stumble.

- When working on or above open grating, use a canvas or other suitable covering to cover the grating to prevent tools or parts from dropping to a lower level where others are present, or barricade or guard the danger area.

- Do not depend on the insulation on hand tools to protect users from shock.

16.12.2 Electric Tools

CDM Smith employees who have a need to use electric power tools should use the following work practices:

- The non-current carrying metal parts of portable electric tools such as drills, saws, and grinders shall be effectively grounded when connected to a power source unless the tool is an approved double-insulated type or the tool is connected to the power supply by means of an isolating transformer or other isolated power supply, such as a 24-volt DC system.

- All power tools shall be examined before use to ensure general serviceability and the presence of all applicable safety devices. The electric cord and components shall be given a thorough examination for cracks, exposed wires, or other defects.

- Power tools shall be used only within their capability and shall be operated in accordance with the manufacturers' instructions.

- The use of eye protection is required when using or working around power tools.

- Operators should take care to use appropriate hand positions on cutting tools such as saws, drills, or grinders to avoid hand injury.

- All tools shall be kept in good repair and disconnected from the power source while repairs are being made.

- Electrical tools shall not be used where there is a hazard of flammable vapors, gases, or dusts until that hazard is firmly under control.

- GFCI should be used with all electric power tools.

- All guards and safety interlocks with which the tools were purchased shall be in place and in working order.

- Any tool that is identified as defective should be tagged "not for use," and set aside for repair and/or discarded.
- Do not wear loose or frayed clothing while operating power tools and equipment. Hair should not stick out from hard hats.
- Do not use electrical cords to transport, suspend, hoist, or lower tools.
- Do not allow power cords to lie in water.
- Disconnect rotating tools from the power source before adjusting, servicing, or cleaning them. Follow the lockout procedure described in Section 16.5.
- Do not modify tools.

16.12.3 Pneumatic Tools

CDM Smith employees that use pneumatic power tools should use the following work practices:

- Compressed air and compressed air tools shall be used with caution.
- Pneumatic tools shall never be pointed at another person.
- Pneumatic hose connections should be secured by some positive means to prevent them from becoming accidentally disconnected. Chicago fittings have wire holes to allow such security.
- Pneumatic power tools shall be secured to the hose by some positive means to prevent the tool from becoming accidentally disconnected.
- Safety clips or retainers shall be securely installed and maintained on pneumatic impact tools to prevent attachments from being accidentally expelled.
- Compressed air shall not be used for cleaning purposes except when reduced to less than 30 psi and then only with effective chip guarding and PPE.
- Compressed air shall not be used to blow dust or dirt from clothing (or skin).
- The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fittings shall not be exceeded.
- The use of hoses for hoisting or lowering tools shall not be permitted.
- All compressed air hoses exceeding 30 psi shall have a safety device at the source of supply or branch line to reduce pressure in case of hose failure or disengagement of a connection.

- Before making adjustments or changing air tools, the air shall be shut off at the air supply valve ahead of the hose. The hose shall be bled at the tool before breaking the connection. Disconnection at the quick-change connectors is one way to meet this goal.
- Eye protection is required when using or working around pneumatic tools.
- Use hearing protection if noise exposure is a concern (i.e., if it is too loud to conduct a normal conversation).
- Pneumatic tools shall be operated only by persons trained in their use.
- A pneumatic tool used where it may contact exposed live electrical parts shall have a nonconductive hose and an accumulator to collect moisture.
- Employees shall not use any part of their bodies to locate or attempt to stop an air leak.
- All guards and safety interlocks must be in place and functional.

16.12.4 Engine-Powered Tools

CDM Smith employees that use engine-powered tools should use the following work practices:

- Stop the engine and allow it to cool before refueling, servicing, or maintenance.
- Use care in refueling. Clean up any small spills of fuel or oil immediately.
- The use of eye protection is required when using or working around engine-powered tools.
- Use hearing protection if noise exposure is a concern (i.e., if it is too loud to conduct a normal conversation).
- If possible, disconnect the spark plug before performing an adjustment, maintenance, or service.
- Use tools in well ventilated areas to eliminate any accumulation of fumes.
- Do not use tools in a flammable or explosive atmosphere.
- Equip engines with spark-arresting mufflers.
- Avoid contact with hot engine components.
- All guards and safety interlocks should be in place and functional.

16.15 Working Around Heavy Equipment

Good work practices while working around heavy equipment include:

- Assume the operator cannot see you. The operator's vision may be blocked by blind spots. He or she is frequently concentrating on their work and equipment and may not notice a site visitor.
- If you must approach the operator, be sure you have made eye contact with the operator and they know you will be approaching them before approaching the equipment. Verbal contact, direct or by radio, is even better. Do not approach if the equipment is moving or in operation.
- Stay clear of pinch points and swing areas of equipment. At CDM Smith projects, these areas should be taped or barricaded off; however, when equipment moves frequently, you cannot count on other organizations to mark these zones.
- Do not walk near a moving piece of equipment. It could turn or rotate any minute. Modern construction equipment moves fast and in any direction.
- On a noisy site, you may not notice the equipment's back-up alarm. Keep aware of what is happening around you.
- Never walk under a load on a crane or hoist. Indeed, avoid the area under the hook or bucket.
- Do not cut across the path of equipment backing up.
- Wear your hardhat and safety glasses. The safety glasses protect your eyes from dust and debris and the hardhat provides protection for your head and makes you more visible on the site.
- On sites where there is frequent vehicle or construction equipment movement, wear high-visibility clothing.
- Maintain a clearance of at least 10 feet between any part of the machine or its load and any electrical line or apparatus carrying up to 50,000 volts. One foot of additional clearance is required for every additional 30,000 volts.

16.18 Safety Working Around Drill Rigs

The use of mechanical drill rigs to collect soil samples and install monitoring wells presents significant hazards to operators and helpers, as well as technicians and engineers who may work in proximity to such rigs. CDM Smith employees that manage or oversee drilling operations should be aware of the basic hazards of drilling equipment and operations and have an awareness of safe drilling work practices. The guidelines and work practices described below should be implemented on all projects where mechanical drill rigs are used.

16.18.1 Preparation

- Contract documentation with drillers contracted with CDM Smith should include CDM Smith's standard contract between "Engineer & Subcontractor for Drilling Services," and "Health and Safety Protocol for Subcontractors" available on the Office of General Council's page of contract forms at http://cdmweb/legalforms/inc.htm.

- Before drilling or other subsurface operations, a survey should be conducted to identify any overhead or underground utilities, unexploded ordnance, tanks, pipes, or other underground structures. The local agency or organization for utility location should be contacted to identify underground utilities. In some cases, ground penetrating radar or magnetometer studies may be needed to identify the location of underground obstructions.

- The work area for the drill rig and crew should be cleared of sticks, logs, brush, and trash. Inspect the area for any potential tripping hazards and remove them. If they cannot be removed, they should be identified with caution tape or cones.

- Before rig setup, the planned arrangement of equipment should be such that it does not present a dangerous condition. Take into account slopes of hills, mud, standing water, overhead power lines, etc.

- OSHA regulations require that any part of the rig must be at least 10 feet away from power lines under 50kV or less. For higher voltage lines, 1 foot of additional clearance is required for every additional 30,000 volts.

- If working in an area of moving vehicular traffic, appropriate traffic control systems should be in place. Contact local police or traffic control officer, before placing any traffic control equipment (Section 16.22).

- Define an exclusion zone around the drill rig that is at least 1.5 times the height of the mast. Only personnel necessary for the immediate task being performed should be inside the exclusion zone.

16.18.2 Drill Rig Inspection

- After the rig is set up, but before operation, the work area should be inspected for eye, bump, and tripping hazards.
- The driller should inspect the rig daily before operation of the rig. The inspection should include the following:
    - Condition of the vehicle. Brakes should work and tires should have adequate tread. It should have a back-up alarm. If it is driven over the road, it should have all necessary brake lights, headlights, horn, license plates, etc.
    - All welds should be solid, with no sign of visible cracks.
    - All gauges should be functional and legible.
    - All machine guards should be in place.
    - Emergency kill switches should be functional. All site personnel should be aware of the location and function of the kill switches. Have the driller review these with site personnel.
    - Cable and wire rope should be inspected for fraying, decay, "bird caging," broken strands, kinking, or flattening.
    - All hoses should be secure and in good shape. They should not be loose, bulging, or leaking.
    - High-pressure fittings should be secure and have whip checks (a pin or wire to prevent the hose whipping in the event of a failure of the connection).
    - High-pressure relief valves should be in working order.
    - Wire rope loops should be secure with at least two clamps.
    - The rig should have a fire extinguisher and first aid kit.
    - All tools should be clean and in good working condition. Hooks, eyes, pins, etc. should not be corroded or bent. Rod clamps should be in good condition.
    - If a cathead is used, it should be clean and free of burrs. The cathead rope should be in good condition and not be frayed or have excessive wear.
    - Back-up alarms should be functional.
    - Vehicles should have all lug nuts and they should all be tight.

16.18.3 Work Practices

- All personnel working around drilling operations should wear appropriate PPE including a hard hat, safety glasses, and hard-toed work boots.
- Drill crews should wear work gloves.
- On hazardous waste sites, additional PPE such as respirators, protective clothing, gloves, etc. may also be required.
- In areas where there is vehicular traffic, personnel should also wear high-visibility vests or clothing.
- Maintain an organized work area free from tripping hazards.
- Drill rods or other equipment should not be stored leaning up against equipment.
- Drill holes should be completed or secured before leaving the site for the day. Drill holes should not be left open at an unattended site.
- Boring locations should be placed to minimize the possibility of contacting underground utilities or structures. Clearance should be obtained from the site project manager before drilling begins.
- Do not move the rig with the mast in the upright position.
- Use a spotter when moving the rig from one location to another on the site.
- When sampling activities require working in proximity with heavy equipment or drill rigs, sampling personnel will stand clear of the equipment until sampling is required. They will notify the operator they are going to take a sample and must receive acknowledgment from the operator.
- Do not wear loose clothing such as hooded sweatshirts, parkas, or clothing with hanging drawstrings around drill rigs.
- Monitor weather conditions. Drilling operations should be terminated and the area near the drill rig evacuated during high winds and or storms with the potential for lightning strikes. The lead driller should be consulted to help assess if weather conditions are safe for drilling.
- Drill crew personnel should wear a personal fall arrest harness, connected to a secure tie-off point, when climbing the mast or working where fall exposures exceed 6 feet.
- Hearing protection should be worn during operations that produce significant noise exposures. (If you cannot hold a conversation using a normal voice with someone within 3 feet of you because of background noise, the use of personal hearing protection is recommended.)

16.21 Decontamination at Hazardous Waste Sites

Proper decontamination helps protect employees and prevents the contamination of uncontaminated areas. Decontamination protects all site personnel by minimizing the transfer of harmful materials into clean areas. It helps prevent mixing of incompatible chemicals and protects the community by preventing uncontrolled transportation of contaminants from the site.

16.21.1 Prevention of Contamination

To prevent contamination, crew members should:

- Follow procedures for proper dressing before entry into the exclusion zone. Proper dressing will minimize the potential for contaminants to bypass the PPE and escape decontamination.
- Protect monitoring and sampling instruments by bagging. Make openings in the bags for sample ports and sensors that must contact site materials, or cover equipment and tools with a strippable coating, which can be removed during decontamination.
- Encase any source of contaminants on the site with barriers (e.g., plastic sheeting or over packs).
- Stress work practices that minimize contact with hazardous substances. Use remote sampling, handling, and container-opening techniques.

16.21.2 Decontamination Equipment Selection

In selecting decontamination equipment, consider whether the equipment must be decontaminated for reuse or can be easily disposed. Recommended equipment for decontamination includes:

- Storage tanks or appropriate treatment systems
- Drains or pumps
- Long-handled brushes
- Wash solutions appropriate for the contaminants present
- Rinse solutions appropriate for the contaminants present
- Pressurized sprayers for washing and rinsing
- Curtains, enclosures, or spray booths
- Long-handled rods and shovels
- Containers to hold contaminants and contaminated soils
- Wash and rinse buckets
- Brooms
- Containers for the storage and disposal of contaminated material

16.21.3 Decontamination Design

Decontamination facilities should be located in the CRZ, i.e., the area between the exclusion zone (the contaminated area) and the support zone (the clean area), and described in the site HSP.

- Site-specific factors that affect the decontamination facility design must be considered. Typical factors include:
  - The chemical, physical, and toxicological properties of the wastes
  - The pathogenicity of infectious wastes
  - The amount, location, and containment of contaminants
  - The potential for and location of exposure based on assigned worker duties, activities, and functions
  - The potential for wastes to permeate, degrade, or penetrate materials used for personal protective clothing and equipment, vehicles, tools, buildings, and structures
  - The proximity of incompatible wastes
  - The movement of personnel and/or equipment among different zones
  - The emergencies that may arise
  - The methods available for protecting workers during decontamination
  - The impact of the decontamination process and compounds on worker H&S
- Decontamination Line
  - Decontamination should be an organized process by which levels of contamination are reduced.
  - The decontamination process consists of a series of steps performed in a specific sequence. For example, outer, more heavily contaminated items are decontaminated first, followed by the decontamination and removal of inner, less contaminated items.
  - Each step should be performed at separate stations to prevent cross contamination.
  - Decontamination stations should allow enough separation to prevent cross contamination and should be arranged in order of decreasing contamination.
  - Separate decontamination areas should be provided to isolate workers from different contamination zones containing incompatible wastes or decontamination processes.
  - Entry and exit points should be conspicuously marked. Preferably the entry to the CRZ from the exclusion zone should be separate from the entry to the exclusion zone from the CRZ.
  - Dress-out stations for entry to the CRZ should be separate from redressing areas for exit from the CRZ.
  - Personnel who wish to enter clean areas of the decontamination facility, such as locker rooms, must be appropriately decontaminated first.
  - Examples of decontamination lines and procedures for personnel wearing various levels of protection are provided in Exhibits 16A and B.

16.21.4 PPE for Decontamination Workers

A rule of thumb is that decontamination workers wear a level of protection one level below the level of protection worn in the exclusion zone. However, consideration should be given to the following when determining the level of protection for a given project.

- The nature of site contamination
- Degree of contamination expected on workers leaving the exclusion zone
- The results of wipe tests and onsite air monitoring

Some site-specific cases may require that decontamination personnel wear the same level of PPE as workers in the exclusion zone. Cases include:

- Workers using a steam jet may need a different type of respiratory protection than other decontamination personnel because of the high moisture content of the steam jets.

- Cleaning solutions used and wastes removed during decontamination may generate harmful vapors, requiring a different type of respiratory or clothing protection.

16.21.5 Decontamination Methods

All personnel, clothing, equipment, and samples leaving the contaminated area of a site should be decontaminated to remove any harmful chemicals, radioactive material, or infectious organisms that may have adhered to them. The extent of decontamination will vary depending on the nature of site activity, site contamination, and other factors.

- Decontamination methods available include:

    - Physical removal
    - Chemical detoxification or disinfections/sterilization
    - A combination of both physical and chemical methods

- The selected decontamination method should be reviewed for any safety and health hazards. If the selected method poses a direct health hazard, measures shall be taken to protect both the decontamination personnel and the workers to be decontaminated.

- Physical Removal

    - Physical methods using high pressure and/or heat should be used with caution.
    - Loose contaminants can be removed by using a soap and water rinse with a soft bristle brush to remove dust and vapors that cling to equipment and workers, or that are trapped in small openings, such as clothing or fabric weaving.

- Adhering contaminants can be removed by:

    - Scraping, brushing, and wiping.
    - Solidifying.
    - Freezing (using dry ice or ice water).
    - Adsorption or absorption (e.g., kitty litter or powdered lime).
    - Melting.

- Volatile liquid contaminants can be removed from PPE or equipment by evaporation followed by a water rinse. Evaporation may be expedited by the use of steam jets.

- Chemical Removal

  - Decontamination using chemicals should only be done if recommended by an industrial hygienist or other qualified professional.
  - Any chemical used in the decontamination process must be chemically compatible with the equipment or clothing being decontaminated.
  - Halogenated solvents should only be used for decontamination in extreme cases where other cleaning agents will not remove the contaminant.

- Chemical removal types include the following:

  - Surface contaminants can be dissolved in a solvent.
  - Solidification of liquid or gel contaminants can enhance their physical removal. Typical solidification processes are moisture removal using adsorbents such as grounded clay or powdered lime; and chemical reactions using polymerization chemicals and/or chemical reagents.

16.21.6 Personnel Decontamination

Different levels of personnel protection, as discussed in the PPE guidelines, may be used at any given site. The following is a description of the decontamination process for each level of protection.

- **Level D**

  - An area should be designated for the gross removal of dirt and mud from gloves and boot covers. Paper towels and buckets of rinse water can be made available for this purpose.
  - Typical decontamination steps for Level D operations are provided in Exhibit 16-B.
  - Soap and water should be used to wash hands and face before leaving the site.
  - Laundering of personal clothing should be completed as soon as possible once offsite.

- **Level C and B**

  - A decontamination line should be established.
  - Site-specific procedures should be outlined in the site HSP. The recommended procedure for this layout is listed in Exhibit 16-C.

- **Level A** - It is not anticipated CDM Smith will directly participate in Level A operations. If required, site-specific procedures will be developed in coordination with the division HSM.

16.21.7 Sampling and Monitoring Equipment Decontamination

Sampling equipment often becomes grossly contaminated. Often trowels or drum thieves (coliwassas) are dedicated to a particular site. These should be left in the exclusion zone and disposed of as contaminated waste at the end of site work. Sampling equipment such as split spoons or other equipment that is used to collect several samples must be cleaned and decontaminated between samples to prevent cross contamination. These items should be cleaned and decontaminated in accordance with the project operations or sampling

plan. Dirt and wash solutions from sampling equipment decontamination should be collected and disposed of as investigation-derived waste.

Once grossly contaminated, testing and monitoring instrumentation can be difficult to decontaminate without causing damage to the instrument. Care should be taken in the field to prevent gross contamination of field instruments by avoiding direct contact between the instrument and contaminated soils, water, or surfaces. In some cases it may be necessary to place instruments in plastic bags, leaving small openings for sampling ports, detectors, and exhaust ports. The plastic bags can then be removed as the instrument comes out of the exclusion zone. The outside of instruments can be wiped down with paper towels or brushed off with clean soft brushes.

16.21.8 Heavy Equipment Decontamination

Drill rigs, trucks, backhoes, and other heavy equipment can be difficult to decontaminate. The method generally used is to wash them with water under pressure and scrub accessible areas with soap and warm water. Hot water and steam systems can be effective but may increase air concentrations of contaminants, exposing decontamination workers. Particular care should be taken where equipment comes into direct contact with contaminated soils such as tires, buckets, or treads. In severe cases, tires may need to be replaced or parts sand blasted clean or disposed of. Equipment should be visually inspected to be sure it is free of any visible signs of contamination. In some cases, wipe tests or other methods may be needed to confirm equipment has been adequately decontaminated before leaving the site.

16.21.9 Decontamination Solutions, Disposable PPE, and Site Wastes

Potentially contaminated equipment, disposable PPE, respirator cartridges, disposable sampling equipment, brushes, buckets, waste decontamination solutions, etc. should be secured in drums and labeled. Disposal methods for these materials may depend on client requirements and/or results of site investigation data. The confirmed presence of hazardous materials on the site may require disposal of investigation-derived wastes as hazardous wastes.

Care should be taken during work and decontamination activities to minimize waste materials generated.

Exhibit 16-B
Minimum Measures For Level D Decontamination

Station 1 - Equipment Drop	Deposit equipment used on plastic drop cloths. Segregation at the drop reduces the probability of cross contamination. During hot weather, a cool down station may be set up in this area.
Station 2 - Outer Garment, Boots, and Gloves Wash and Rinse	Scrub outer boots, outer gloves, and suit with decontamination solution or detergent/water. Rinse off using copious amounts of water.
Station 3 - Hard Hat, Outer Boot, and Glove Removal	Remove hard hat, outer boots, and gloves.
Station 4 - Boots, Gloves, and Outer Garment Removal	Remove boots, suit, and inner gloves and deposit in separate containers lined with plastic.
Station 5 - Field Wash	Wash hands and face.

Exhibit 16-C
Minimum Measures For Level B, And C Decontamination

Station 1 - Equipment Drop	Deposit equipment used on plastic drop cloths. Segregation at the drop reduces the probability of cross contamination. During hot weather, a cool down station may be set up in this area.
Station 2 - Outer Garment, Hard Hat, Boots, and Gloves Wash and Rinse	Scrub outer boots, hard hat, outer gloves, and suit with decontamination solution or detergent/water. Rinse off using copious amounts of water.
Station 3 - Tank/Air Canister Change	If a worker leaves the exclusion zone to change an air tank, air canister, or mask, this is the last step in the decontamination procedure. Worker's air tank is exchanged, new outer gloves and boots donned, and joints tapped. Worker returns to duty.
Station 4 - Outer Boots, and Glove Removal	Remove outer boots and gloves. Deposit in container with plastic liner.
Station 5 - SCBA/Respirator Removal	SCBA backpack and facepiece/respirator is removed (avoid touching face with fingers). SCBA or respirator is deposited on plastic sheets.
Station 6 - Inner Gloves and Outer Garment Removal	Remove suit and inner gloves and deposit in separate containers lined with plastic.
Station 7 - Field Wash	Shower if highly toxic, skin-corrosive, or skin-absorbable materials are known or suspected to be present. Wash hands and face.

16.22 Traffic and Work Zone Safety

These guidelines apply whenever CDM Smith employees or subcontractors work in areas exposed to vehicular traffic on public streets or highways.

- Where vehicular traffic hazards exist because of work at locations near public streets or roads, a system of traffic and work zone controls should be developed to mitigate the hazard. The system should meet the requirements of Part 6 of the Manual of Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration, or the applicable state version of the MUTCD.

- In general, when the MUTCD allows the use of traffic safety direction devices, such as cones, CDM Smith will supplement those direction devices with a physical barrier, such as a truck.

- All traffic control systems on public roads must be coordinated with local traffic control officials as required by applicable law.

- Periodically evaluate effectiveness of temporary traffic control setups by walking or riding the job area looking for evidence of poor controls and near misses such as swerving traffic, motorists braking quickly, skid marks, blind spots, etc.

- Give motorists plenty of advanced warning of upcoming work zones.

- All employees working within designated work zones or near vehicular traffic should wear high-visibility clothing such as orange, yellow, or yellow-green shirts, jackets, or vests. During wet or inclement weather, similarly colored rainwear should be worn.

- During night work, between the hours of sunset and sunrise, high-visibility clothing should incorporate reflective striping or fabric and be visible at a distance of 1,000 feet. This clothing should meet ANSI standard #107 for High Visibility Safety Apparel.

- All employees working near traffic and vehicles must maintain situational awareness at all times. Stay mindful that warning signs and cones inform drivers to take action but that some drivers may not pay attention, and vehicles may still enter the work zone.

16.2 Housekeeping

These guidelines are for the establishment and administration of a clean and orderly work environment at field project sites. A continuous housekeeping program strongly tends to prevent accidents. A clean and orderly work environment can be achieved and maintained through ongoing housekeeping efforts undertaken by personnel at all levels. Project managers shall initiate participation in housekeeping activities and good work habits, not only at the end of a work assignment, but throughout the evolution of the project.

- To achieve these benefits, the team shall plan the location of equipment and storage facilities to allow the easy flow of personnel, equipment, materials, fire hazards, and to prevent the obstruction of evacuation, fire fighting, or rescue activities.

- Store materials in a manner that facilitates access of material handling equipment and personnel handling limitations. Lack of sufficient workspace and storage capacity leads to the potential for accidents and decreases efficiency.

- Avoid storage of flammable liquids, such as paints and thinners unless they are required for specific project needs. If needed, such storage shall be within a metal storage cabinet that has been labeled and approved for the storage of flammable liquids.

- Continuously maintain work areas in a neat and orderly manner.

- Containers should be provided for the collection of waste, trash, and other non-hazardous refuse. Investigation-derived waste and other waste materials that are potentially hazardous should be stored and labeled in accordance with project specific procedures that meet regulatory and client requirements.

- Deploy leads, hoses, and extension cords so they do not present tripping hazards, and are not subject to contact with moisture or physical stress. Where possible they should be hung overhead with non-conductive material and kept away from walkways, doors, stairs, and ladders.

- Protect protruding rebar and anchor bolts and conspicuously mark them.

- Clean small spills that create slip hazards and or flammability hazards immediately and not leave them unattended.

- Keep walkways, aisles, stairways, and passageways in a clear and unobstructed condition.

- Prohibit eating and drinking in work areas where there is potential exposure to toxic or hazardous materials. Smoking is limited to designated smoking areas where there is no such exposure.

16.20 Hazardous Waste Site Controls

Work sites designated as Hazardous Waste Sites must control access to the work area to only authorized personnel and conform to general work practices expected at hazardous waste site operations as required by the OSHA Standard for Hazardous Waste Operations, 29 CFR 1910.120. The following concepts should be reflected in the health and safety plan for the project.

16.20.1 Access Control

Controlled access to hazardous waste site work areas is required to protect personnel working on the site as well as to limit the potential for transporting contaminants off site. Depending on the size of the work site, hazards and contaminants present, and complexity of the work, access control may range from verbally cautioning non-authorized personnel to stay away from the work area, to a program including site security, signs, or formal sign in and sign out procedures. Details of site-specific access control procedures should be included in the site-specific health and safety plan. Some general work practices for access control are noted below:

For small-scale site investigations that are short-term projects (i.e. days not weeks or months), identify a work area to the work crew and keep persons not associated with the job site out of the work area. If the site is in an area where non-authorized persons are likely to be encountered, traffic cones, caution tape, and signs identifying the area as a controlled access area may be used.

For more extensive projects where work may be done for weeks or longer, the team the should deploy more extensive access controls. They should:

- Set up physical barriers and hire security personnel to prevent non-authorized persons from entering the work site.
- Keep the number of personnel and equipment on site to the minimum required to do the project effectively and safely.
- Establish work zones within the site,(see the next section- work zones).
- Establish controlled access points to be used by authorized personnel.
- Track the entry and exit of personnel through a check-in, checkout system.
- Establish a formal decontamination corridor from exclusion zones.

16.20.2 Work Zones

Field project managers, working under health and safety plans for hazardous waste operations are required to establish work zones to prevent or reduce the spread of site contaminants to non-contaminated areas on or off site. Movement between zones should be restricted to those that need access to a specific area, and entry and exit between zones should be through designated access control points. A description of the three work-zone system for hazardous wastes is provided below.

Exclusion Zone – The exclusion zone should include any area where contamination is known or suspected. Areas of air, water, or soil that are contaminated with hazardous

materials (biohazards, radioactive materials, chemicals) should be included in the exclusion zone. The zone should be well known to site workers. On smaller projects, this can be a verbal identification to site workers, such as "A 20-foot radius around the drill rig". On larger projects, or in areas that may be encountered by observers or the general public, the zone may need to be defined with caution tape, traffic cones or in some instances, fencing and barriers. The need will be site specific and the specific method should be identified in the site-specific health and safety plan. Some work practices that should be followed in the exclusion zone include:

- Employees in the exclusion zone must wear the PPE designated in the site health and safety plan for tasks executed within the zone.
- No eating, drinking, chewing gum or tobacco, smoking, application of cosmetics, including application of lip balm, sunscreen, or insect repellant is allowed in the exclusion zone.
- Sitting or kneeling in areas of high concentrations of contaminants should be avoided.
- If any PPE becomes defective, the employee should leave the work area via the designated egress area, decontaminate as needed, and replace the defective PPE before returning to work in the exclusion zone.
- Prescription drugs should not be used within the exclusion zone unless approved by CDM's medical consultant. The use of illegal drugs or consumption of alcohol is prohibited.
- When leaving the exclusion zone, employees should exit via the designated access/egress point(s) and follow decontamination procedures described in the site health and safety plan.

Contaminant Reduction Zone (CRZ)– A CRZ is established to provide a transition between the exclusion zone and the support zone. The CRZ is set up at the access control points of the exclusion zone and will vary in size depending on the complexity of activities that need to occur within the zone. For small site investigations, the CRZ may simply be a designated area near containers set up to collect used disposable PPE and some soap and water. For larger projects, the CRZ may include specific decontamination points and be staffed by personnel specifically designated to participate in the decontamination of personnel and equipment exiting the exclusion zone. Depending on the site contaminants, level of contamination, and decontamination procedures, personnel in the CRZ may be required to wear protective clothing, gloves, or respirators. The specific requirements will be outlined in the site health and safety plan. The CRZ should be placed in an area that is not contaminated at the boundary of the exclusion zone.

Support Zone – The support zone is established near the entrance to the site and is far enough from the exclusion zone and CRZ that specialized protective clothing or respirators are not used. The use of normal field PPE such as hard hats, safety glasses, and safety work boots is expected except for areas such as office trailers, break and lunch areas, or other areas designated as having no known or anticipated hazards. Operational support activities and equipment storage and maintenance areas are located

in the support zone. No equipment or personnel should go from the exclusion zone to the support zone without passing through the CRZ and being decontaminated in accordance with the site health and safety plan.

Mobile Work Zone – For those projects that involve brief periods of work in multiple locations, a specific area may be designated as the exclusion zone for the duration of the work performed in that area. The exclusion zone can be terminated (provided there are no ongoing hazards or potential exposures to contaminants) and moved to the next area of work. For example, during soil borings or well installation, the exclusion zone can be defined as, "1.5 times the mast height" of the drill rig. Once the boring has been closed, or well installed and secured, and all drill cuttings have been secured, the area can be opened up and a new exclusion zone established around the next boring location.

16.20.3 Considerations When Establishing Work Zones

Work zones should be large enough to perform tasks within the zone safely, with no exposure to hazards to personnel outside the zone, but they should also be small enough to be able to secure and control access. Some considerations in establishing work zones include:

- Physical and topographical features of the site.
- Dimensions of the contaminated area.
- Weather.
- Physical, chemical, and toxicological characteristics of contaminants and chemicals used in the zone.
- Potential for exposure to site contaminants.
- Known and estimated concentrations of contaminants.
- Air dispersion of contaminants.
- Fire and explosion potential.
- Planned operations and space needed to perform the work safely.
- Surrounding areas.
- Decontamination procedures.
- History of job site.

16.20.4 General Hazardous Waste Site Work Practices

- **Buddy System -** Work should be scheduled so that no person works unobserved within the exclusion zone at any time. Each worker within the exclusion zone should maintain visual contact with at least one other worker on the site. All site personnel should remain aware of each other and monitor each other's condition.

- **Eating, drinking, chewing gum or tobacco, and smoking** - are prohibited within the contaminant reduction and exclusion zones. (Exception for heat stress: Squirt bottles of water, Gatorade, or other fluids may be consumed via squirt bottles in the

contaminant reduction zone with the approval of the health and safety manager. Open bottles, cups, etc. should not be permitted.)

- Sitting or kneeling should be avoided in areas of known or suspected areas of contamination.
- Hands and face should be thoroughly washed when leaving the work area.
- Defective PPE should be repaired or replaced immediately.

Sections 5,6, 7, 9, and 11 of this manual are particularly in applicable to health and safety at hazardous waste sites.

Google maps

Directions to Kaiser Permanente Medical Center-Oakland: Hospital
280 West Macarthur Boulevard, Oakland, CA 94611 - (510) 752-1000
2.4 mi – about **9 mins**
Direction from Sherwin Williams Company Emeryville Site to Nearest Hospital - Kaiser Permanente Medical Center - Oakland - (510)752-1000

A 1450 Sherwin Ave, Emeryville, CA 94608

	1. Head **east** on **Sherwin St** toward **Horton St**	go 276 ft total 276 ft
	2. Turn **right** at **Horton St** About 1 min	go 0.2 mi total 0.2 mi
	3. Take the 2nd **left** onto **40th St** About 7 mins	go 1.9 mi total 2.1 mi
	4. Turn **right** at **Howe St**	go 0.2 mi total 2.3 mi
	5. Take the 1st **right** onto **W MacArthur Blvd**	go 364 ft total 2.4 mi

B Kaiser Permanente Medical Center-Oakland: Hospital
280 West Macarthur Boulevard, Oakland, CA 94611 - (510) 752-1000

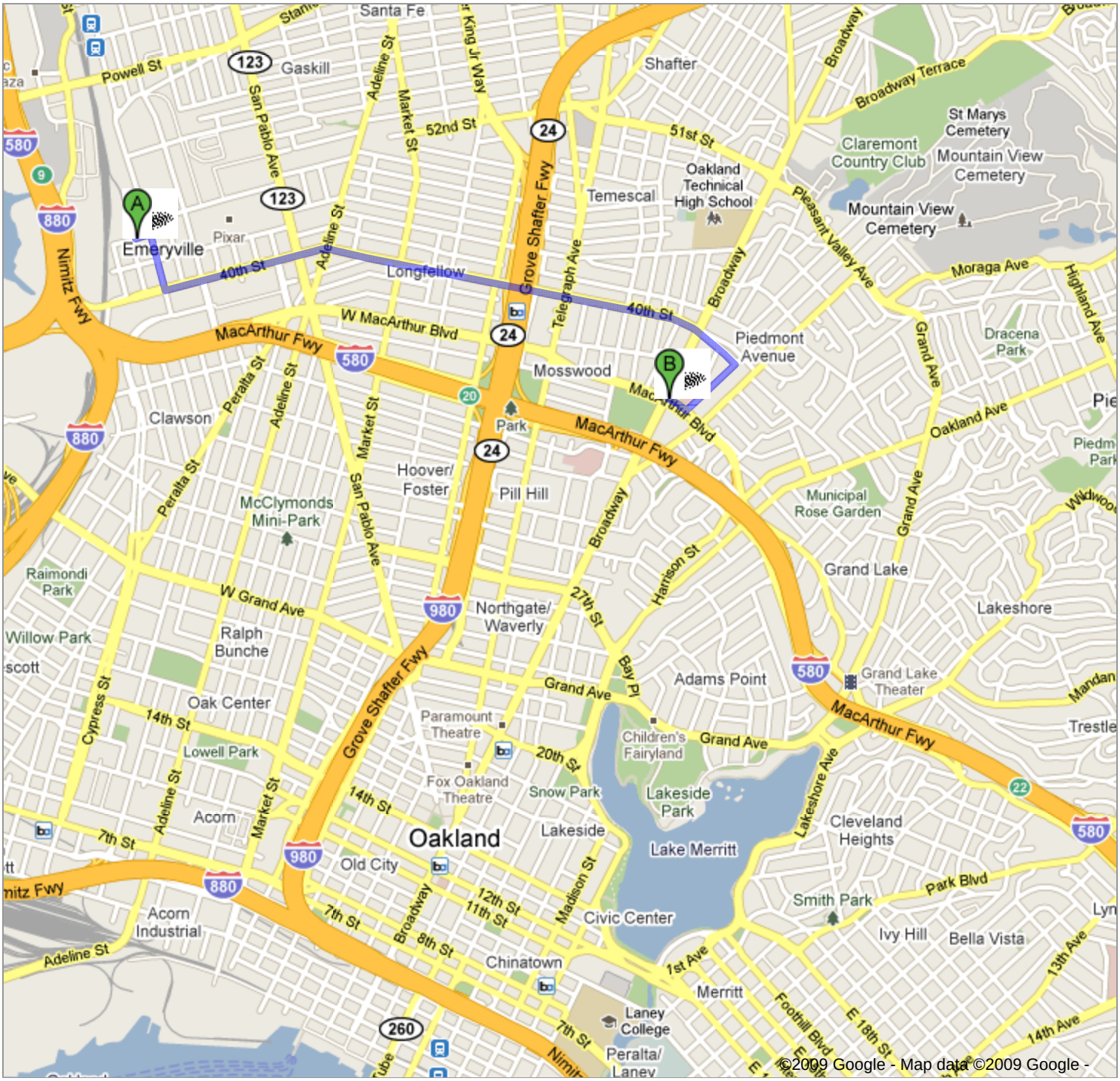
These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2009 , Google

Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.

Google maps

To see all the details that are visible on the screen,use the "Print" link next to the map.



©2009 Google - Map data ©2009 Google -

Locksmith 24/7 - www.AlloverLocksmith.com - Fast Response, Professional Service Call & get 20% Off 1-866-949-5625 Sponsored Links

HEALTH AND SAFETY PLAN SIGNATURE FORM

CDM Smith Health and Safety Plan

All site personnel must sign this form indicating receipt of the H&SP. Keep this original on site. It becomes part of the permanent project files. Send a copy to the Health and Safety Manager (HSM).

SITE NAME/NUMBER: The Sherwin-Williams Company

DIVISION/LOCATION: Emeryville, CA

CERTIFICATION:

I understand, and agree to comply with, the provisions of the above referenced H&SP for work activities on this project. I agree to report any injuries, illnesses or exposure incidents to the site Health and Safety Coordinator (SHSC). I agree to inform the SHSC about any drugs (legal and illegal) that I take within three days of site work.

PRINTED NAME	SIGNATURE	DATE

Site Specific Health and Safety Plan

Revision 11 9/20/2012

Project Name: The Sherwin Williams Company
1450 Sherwin Avenue
Emeryville, California

Project Number: EM002616
Client Name: Sherwin Williams Company
Date: 11/19/2012
Revision: 2012 Update

Approvals:

HASP Developer: Erica Whiting

HASP Reviewer: Ron Goloubow

Project Manager: Lucas Goldstein

Emergency Information

Site Address: 1450 Sherwin Avenue
Emeryville, California

Emergency Phone Numbers:

Emergency (fire, police, ambulance)		911
Emergency (facility specific, if applicable):		
King Security (24 Hr onsite safety)		510-385-0459
Emergency Other (specify)		
Client Contact	Larry Mencin	216.566.1768
WorkCare (non-lifethreatening injury/illness)		1-800-455-6155
Project H&S	Lucas Goldstein	510.596.9535/510.541.6897
Task Manager	Erica Whiting	206.726.4743/303.903.3505
Project Manager	Lucas Goldstein	510.596.9535/510.541.6897
Corporate H&S Specialist	Alec MacAdam	248-994-2259
Corporate H&S Director	Rebecca Lindeman	408-834-0368

Hospital Name and Address: Alta Bates Hospital
2450 Ashby Avenue
Berkeley, California 94705

Hospital Phone Number: (510) 204-4444

Incident Notification Process

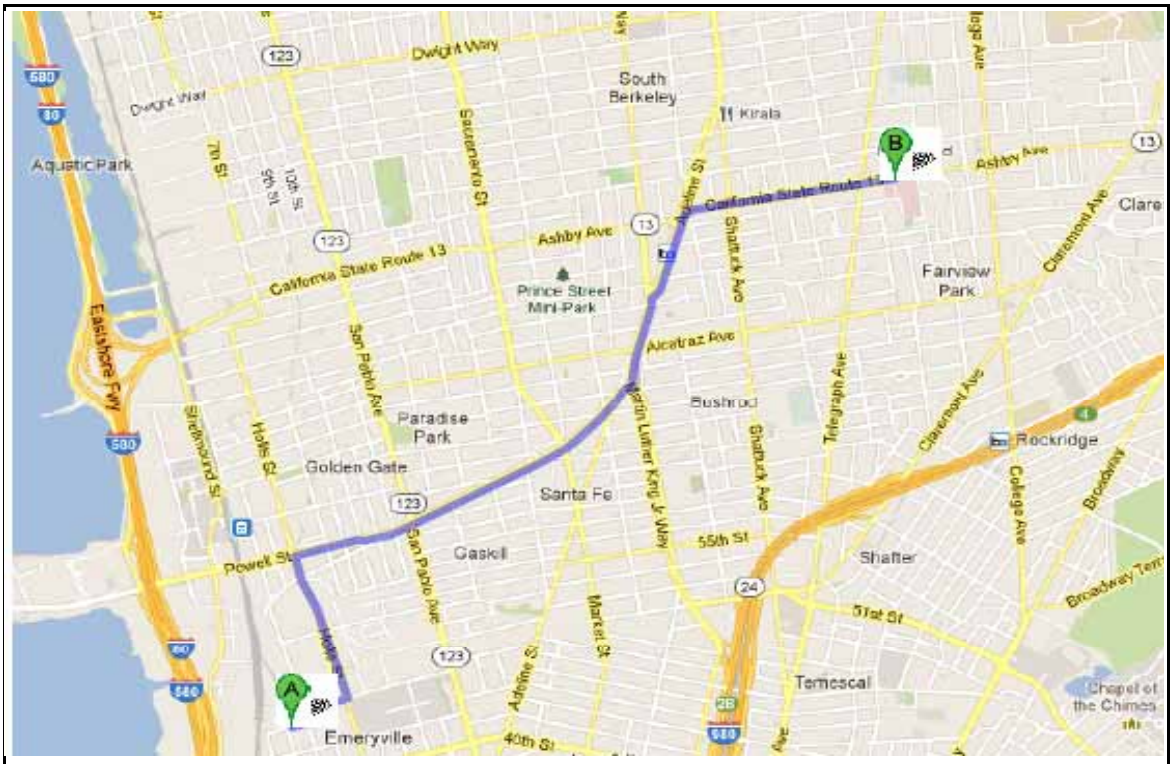
1	Dial 911/Facility Emergency Number/WorkCare as applicable	
2	Contact PM/Supervisor	Lucas Goldstein
3	Contact Corporate H&S	Rebecca Lindeman
4	Contact Client	Larry Mencin

Complete below, as applicable, or clear cell contents:

Location of Assembly Area(s): On-site assembly area: Security Office at Sherwin Building

Nearest Storm Shelter: Onsite Sherwin Building

Route to the Hospital



1450 Sherwin St, Emeryville, CA 94608

	1. Head east on **Sherwin St** toward **Horton St**	go 279 ft total 279 ft
↰	2. Turn left onto **Horton St**	go 200 ft total 479 ft
↱	3. Take the 1st right onto **45th St**	go 0.1 mi total 0.2 mi
↰	4. Take the 1st left onto **Hollis St** About 2 mins	go 0.5 mi total 0.7 mi
↱	5. Turn right onto **Powell St** About 54 secs	go 0.3 mi total 1.0 mi
	6. Continue onto **Stanford Ave** About 3 mins	go 0.8 mi total 1.8 mi
↰	7. Turn left onto **Adeline St** About 2 mins	go 0.6 mi total 2.4 mi
↗	8. Slight right at **down to Adeleine** onto **Ashby Ave/California State Route 13** Destination will be on the right About 2 mins	go 0.6 mi total 3.0 mi

Alta Bates Medical Center
2450 Ashby Avenue, Berkeley, CA 94705

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2012 Google

General Information

Site Type (select all applicable where work will be conducted):

- ☐ Active
- ☐ Bridge
- ☐ Buildings
- ☐ Commercial
- ☐ Construction
- ☐ Government
- ☑ Inactive
- ☐ Industrial
- ☐ Landfill
- ☐ Marine
- ☐ Mining
- ☑ Parking Lot/Private Roadway
- ☑ Railroad
- ☐ Remote Area
- ☐ Residential
- ☐ Retail
- ☑ Roadway (public, inlcuing right-of-way)
- ☑ Secure
- ☐ Unknown
- ☐ Unsecured
- ☐ Utility
- ☐ Other (specify): _____

Surrounding Area and Topography (select one):

☑ Surrounding area and topography are presented in the project work plan
☐ Surrounding area and topography (*briefly describe*):
The area is relatively flat and paved for the most part. Urban setting.

Site Background (select one):

☑ Site background is presented in the project work plan
☐ Site background (*briefly describe)* :
This HSP is for routine periodic groundwater monitoring.

Project Tasks
The following tasks are identified for this project:

Examples: "Drilling/soil sampling", "Surveying", "General Inspections", "Construction Management/Inspections"

1 General Site Work
2 Groundwater Monitoring (water level measurement and collecting groundwater samples)
3
4
5

☐ Subcontractor H&S information is attached
☐ Utility clearance required.
☐ ARCADIS Standards apply to augment JSA *[list standard(s) below]*
☐ ARCADIS Field H&S Handbook sections apply *(list below)*
Comments:

Roles and Responsibilities

	Name	*Role*	*Additional Responsibilities (Describe)*
1	Lucas Goldstein	PM	
2	Erica Whiting	TM	
3	William Semel/Michael Daniels	Field Lead	
4	William Semel/Michael Daniels	SSO	
5			
6			

Training

All ARCADIS employees are required to have the following training:	*Selected ARCADIS employees are required to have the following additional training:*	Names or Numbers from above
☑ 40 hr HAZWOPER w current refresh.	☐ Not applicable	
☐	☑ First aid/CPR/BBP	Michael Daniels; at least one person who is at the site must have first aid training
☐ 24 hr HAZWOPER		
10 hr Construction	☐ 30 hr Construction	
☑ HazMat #1 (Ground/Air/MOT)	☐ 10 hr Construction	
☐ HazMat #4 (MOT)	☐ HazMat #1 (Gr./Air/MOT)	
☐ HazCom/Emergency Action Plan	☐ HazMat #4 (MOT)	
☑ H&S Orientation (classroom); or	☐ Confined space entrant	
☐ H&S Orientation (on-line)	☐ Confined space rescue	
☑ PPE	☐ Excavation CP	
☐ Respiratory protection	☐ Electrical (NFPA 70E)	
☐ MSHA	☐ Lockout/Tagout	
☑ Smith System (on-line)	☐ H&S Orientation (class)	
☐	☑ OTS/eRailsafe	Michael Daniels and any personnel working in railroad right of way.
☐ OTS/eRailsafe		
Client specific:	☐ Smith Sys. (hands on)	
	☐ Boating safety	
☑ Other: Online Flagger Training	☐ Other:	

Hazard Analysis

Risk Assessment Matrix		Likelihood Ratings** (likelihood that incident would occur)			
Consequences Ratings*		A	B	C	D
People	Property	0 Almost impossible	1 Possible but unlikely	2 Likely to happen	3 Almost certain to happen
1 - Slight or no health	Slight or no damage	0 - Low	1 - Low	2 - Low	3 - Low
2 - Minor health effect	Minor damage	0 - Low	2 - Low	4 - Medium	6 - Medium
3 - Major health effect	Local damage	0 - Low	3 - Low	6 - Medium	9 - High
4 - Fatalities	Major damage	0 - Low.	4 - Medium.	8 - High	12 - High

Division
Environment

Business Unit
All Categories

Task 1: General Site Work

Hazardous Activity #1

General-Vehicle -motor vehicle operation (all types on roadways)

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

Biological	-	Chemical	-	Driving	M	Electrical	-
Environmental	-	Gravity	-	Mechanical	-	Motion	-
Personal Safety	-	Pressure	-	Radiation	-	Sound	-

Overall Unmitigated Risk: Medium Mitigated Risk: Low if utilizing:
Primary Controls: TRACK Smith System (on line) Inspections

Secondary Controls: JSAs Admin. Controls

Hazardous Activity #2

Groundwater monitoring - water level measurements & collection of groundwater samples

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

Biological	-	Chemical	-	Driving	L	Electrical	L
Environmental	L	Gravity	-	Mechanical	-	Motion	L
Personal Safety	L	Pressure	-	Radiation	-	Sound	L

Overall Unmitigated Risk: Low Mitigated Risk: Low if utilizing:
Primary Controls: TRACK Smith System (on line)
Secondary Controls: JSAs Admin. Controls

Hazardous Activity #3

Field-Ambient environment - exposure heat, cold, sun, weather, etc

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

Biological	-	Chemical	-	Driving	M	Electrical	L
Environmental	L	Gravity	H	Mechanical	-	Motion	L
Personal Safety	M	Pressure	-	Radiation	-	Sound	-

Overall Unmitigated Risk: Medium Mitigated Risk: Medium if utilizing:
Primary Controls: TRACK PPE (see HASP "PPE" section) Field H&S Handbook

Secondary Controls: H&S Standards Engineering Controls Admin. Controls Specialized Equipment

Hazardous Activity #4

Field-Railroad - work in the vicinity of moving trains (non-rail yard inspection and field activities)

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

Biological	-	Chemical	-	Driving	M	Electrical	-
Environmental	-	Gravity	M	Mechanical	H	Motion	H
Personal Safety	H	Pressure	-	Radiation	-	Sound	L

Overall Unmitigated Risk: High Mitigated Risk: Medium if utilizing:
Primary Controls: TRACK Client Training/Briefing On Track Safety Training Specialized Checklist/Forms eRailsafe PPE (see HASP "PPE" section)

Secondary Controls: JSAs HASP Job Briefing/Site Awareness Cont/Emerg. Planning Engineering Controls Admin. Controls PPE (see HASP "PPE" section) Specialized Equipment Inspections H&S Standards

Risk Assessment Matrix		Likelihood Ratings** (likelihood that incident would occur)			
Consequences Ratings*		A	B	C	D
People	Property	0 Almost impossible	1 Possible but unlikely	2 Likely to happen	3 Almost certain to happen
1 - Slight or no health	Slight or no damage	0 - Low	1 - Low	2 - Low	3 - Low
2 - Minor health effect	Minor damage	0 - Low	2 - Low	4 - Medium	6 - Medium
3 - Major health effect	Local damage	0 - Low	3 - Low	6 - Medium	9 - High
4 - Fatalities	Major damage	0 - Low.	4 - Medium.	8 - High	12 - High

Task 2: Groundwater Monitoring (water level measurement and collecting groundwater samples)

Hazardous Activity #1

Chemical -Carcinogens - exposure to these materials

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

Biological	-	Chemical	L	Driving	-	Electrical	-
Environmental	-	Gravity	-	Mechanical	-	Motion	-
Personal Safety	-	Pressure	-	Radiation	-	Sound	-

Overall Unmitigated Risk: Low Mitigated Risk: Low if utilizing:

Primary Controls: TRACK HASP Engineering Controls PPE (see HASP "PPE" section)

Secondary Controls: Job Briefing/Site Awareness Hazcom Training MSDS (see also HASP Hazcom section) Client Training/Briefing Specialized Equipment

Hazardous Activity #2

Field-Measurement - water levels and well sounding

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

Biological	-	Chemical	L	Driving	-	Electrical	-
Environmental	-	Gravity	L	Mechanical	-	Motion	M
Personal Safety	-	Pressure	-	Radiation	-	Sound	-

Overall Unmitigated Risk: Low Mitigated Risk: Low if utilizing:

Primary Controls: TRACK JSAs PPE (see HASP "PPE" section)

Secondary Controls: Job Briefing/Site Awareness

Hazardous Activity #3

Field-Sampling - monitoring well sampling - manual (bailer, check valve)

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

Biological	-	Chemical	L	Driving	-	Electrical	-
Environmental	-	Gravity	L	Mechanical	-	Motion	M
Personal Safety	-	Pressure	-	Radiation	-	Sound	-

Overall Unmitigated Risk: Low Mitigated Risk: Low if utilizing:

Primary Controls: TRACK JSAs Engineering Controls Job Rotation PPE (see HASP "PPE" section)

Secondary Controls: Job Briefing/Site Awareness Admin. Controls

Hazardous Activity #4

Field-Sampling - sample cooler preparation

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

Biological	-	Chemical	M	Driving	-	Electrical	-
Environmental	-	Gravity	M	Mechanical	L	Motion	L
Personal Safety	M	Pressure	-	Radiation	-	Sound	-

Overall Unmitigated Risk: Medium Mitigated Risk: Low if utilizing:

Primary Controls: TRACK JSAs Engineering Controls PPE (see HASP "PPE" section) See HASP "Monitoring" section

Secondary Controls: Job Briefing/Site Awareness Admin. Controls Work Plan

Hazard Communication (HazCom)/Global Harmonization System (GHS)

☐ HAZCOM/GHS for this project is managed by the client or general contractor

*List the chemicals anticipated to be used by **ARCADIS** on this project per HazCom/GHS requirements.*
(Modify quantities as needed)

	Acids/Bases	Qty
☐	Not applicable	
☑	Hydrochloric acid	<500 ml
☑	Nitric acid	<500 ml
☐	Sulfuric acid	<500 ml
☐	Sodium hydroxide	<500 ml
☐	Zinc acetate	<500 ml
☐	Ascorbic acid	<500 ml
☐	Acetic acid	<500 ml
☐	Other:	
	_____	
	_____	
	_____	

	Decontamination	Qty
☐	Not applicable	
☑	Alconox	≤ 5 lbs
☐	Liquinox	≤ 1 gal
☐	Acetone	≤ 1 gal
☐	Methanol	≤ 1 gal
☐	Hexane	≤ 1 gal
☑	Isopropyl alcohol	≤ 4 gal
☐	Nitric acid	≤ 1 L
☐	Other:	
	_____	
	_____	
	_____	

	Calibration	Qty.
☐	Not applicable	
☐	Isobutylene/air	1 cyl
☐	Methane/air	1 cyl
☐	Pentane/air	1 cyl
☐	Hydrogen/air	1 cyl
☐	Propane/air	1 cyl
☐	Hydrogen sulfide/air	1 cyl
☐	Carbon monoxide/air	1 cyl
☑	pH standards (4,7,10)	≤ 1 gal
☑	Conductivity standards	≤ 1 gal
☑	Other:	
	ORP standard _____	

	Fuels	Qty.
☐	Not applicable	
☑	Gasoline	≤ 5 gal
☐	Diesel	≤ 5 gal
☐	Kerosene	≤ 5 gal
☐	Propane	1 cyl
☐	Other:	
	_____	

	Kits	Qty.
☐	Not applicable	
☐	Hach (specify): _____	1 kit
☐	DTECH (specify): _____	1 kit
☐	EPA 5035 Soil (specify kit): _____	1 kit
☐	Other:	
	_____	
	_____	

	Remediation	Qty.
☑	Not applicable	
☐	_____	
☐	_____	
☐	_____	
☐	_____	
☐	_____	

	Other:	Qty.
☑	Not applicable	
☐	Spray paint	≤ 6 cans
☐	WD-40	≤ 1 can
☐	Pipe cement	≤ 1 can
☐	Pipe primer	≤ 1 can
☐	Mineral spirits	≤ 1 gal

		Qty.
☐	_____	
☐	_____	
☐	_____	
☐	_____	
☐	_____	
☐	_____	

Material safety data sheets (MSDSs)/Safety Data Sheets (SDSs) must be available to field staff.
Indicate below how MSDS information will be provided:

☐ Not applicable
☐ Printed copy in company vehicle
☐ Printed copy in the project trailer/office
☑ Printed copy attached
☐ Electronic copy on field computer

☐ Contractor MSDSs/SDSs are not applicable
☐ Contractor MSDSs/SDSs are attached
☐ Contractor MSDSs/SDSs will be on site and located: _____

☐ Bulk quantities of the following materials will be stored: _____

Contact the project H&S contact for information in determining code and regulatory requirements associated with bulk storage of materials.

Monitoring

☑ Chemical air monitoring is not required for this project.

For projects requiring air monitoring, list the relevant constituents representing a hazard to site workers.

Constituent	Max. Conc.	Units	TWA	Units	STEL	Units	IDLH	Units	LEL/UEL (%)	VD Air=1	VP (mm Hg)	IP (eV)
None			9999	-	0	-	0	-	0	0	0	0
None			9999	-	0	-	0	-	0	0	0	0
None			9999	-	0	-	0	-	0	0	0	0
None			9999	-	0	-	0	-	0	0	0	0
None			9999	-	0	-	0	-	0	0	0	0
None			9999	-	0	-	0	-	0	0	0	0

Notes: TWAs are ACGIH 8 hr-TLVs unless noted.

p-ppm m-mg/m3
s- skin c-ceiling
r- resipirable i-inhalable

c2- ceiling (2 hr) se-sensitizer
"9999" - NA O-OSHA PEL
N-NIOSH 10 hr REL

"#N/A" -Constituent is not in database, manually enter information

Monitoring Equipment and General Protocols

Air monitoring is required for any task or activity where employees have potential exposure to vapors or particulates above the TWA. Action levels below are appropriate for most situations. Contact the project H&S contact for all stop work situations. Select monitoring frequency and instruments to be used.

Monitoring Frequency:

Indicator Tube/Chip Frequency: Indicator tube/chip monitoring not required

	Instrument	Action Levels			Actions
☐	Photoionization Detector Lamp (eV):		<	0.000	Continue work
		0.000	-	0.0	Sustained >5 min. continuous monitor, review eng. controls and PPE, proceed with caution
			>	0.0	Sustained >5 min. stop work, contact SSO
☐	Flame Ionization Detector (FID)		<	0.0	Continue work
		0.0	-	0.0	Sustained >5 min. continuous monitor, review eng. controls and PPE, use caution
			>	0.0	Sustained >5 min. stop work, contact SSO
☐	LEL/O2 Meter	0-5% LEL			Continue work
		>5-10% LEL			Continuous monitor, review eng. controls, proceed with caution
		>10% LEL			Stop work, evacuate, contact SSO
		19.5%-23.5% O2			Normal, continue work
		<19.5% O2			O2 deficient, stop work, evacuate, cont. SSO
		>23.5% O2			O2 enriched, stop work, evacuate, contact SSO
☐	Indicator: ☐tube ☐hip	≤PEL/TLV			Continue work
		>PEL/TLV			Stop work, review eng. controls and PPE, contact SSO
	Compound(s):				
☐	Particulate Monitor (mists, aerosols, dusts in mg/m^3)		<	2.5	Continue work
		2.5	-	5.00	Use engineering controls, monitor continuously
			>	5.00	Stop work, review controls, contact SSO
☐	Other:	Specify:			Specify:

Personal Protective Equipment (PPE)

See JSA for the task being performed for PPE requirements *. If the work is not conducted under a JSA, refer to the governing document for PPE requirements. At a minimum, the following checked PPE is required for* <u>*all tasks during field work*</u> *not covered by a JSA on this project:*

Level D or Level D Modified:

							Specify Type:
☑	Hard hat	☐	Snake chaps/guards	☐	Coveralls:		
☑	Safety glasses	☐	Briar chaps	☐	Apron:		
☐	Safety goggles	☐	Chainsaw chaps	☐	Chem. resistant gloves:		
☐	Face shield	☐	Sturdy boot	☑	Gloves other:		nitrile
☐	Hearing protection	☑	Steel toe boot	☐	Chemical boot:		
☐	Rain suit	☐	Metatarsal boot	☐	Boot other:		
☐	Other:			☑	Traffic vest:		
				☐	Life vest:		

Task specific PPE:

Comments:

Medical Surveillance (*check all that apply*)

☐ Medical Surveillance is not required for this project.
☑ HAZWOPER medical surveillance applies to all ARCADIS site workers on the project.
☐ HAZWOPER medical surveillance applies to all subcontractors on the project.
☐ HAZWOPER medical surveillance applies to all site workers on the project except:

☐ Other medical surveillance required (describe type and who is required to participate):

☐ Client drug and/or alcohol testing required.

Hazardous Materials Shipping and Transportation (*check all that apply*)

☐ Not applicable, no materials requiring a Shipping Determination will be transported or shipped
☐ A Shipping Determination has been reviewed and provided to field staff
☐ A Shipping Determination is attached
☑ All HazMat will be transported under Materials of Trade by ARCADIS
☐ Other (specify):

Roadway Work Zone Safety (*check all that apply*)

☐ Not applicable for this project
☐ All or portions of the work conducted under a TCP
☐ All or portions of the work conducted under a STAR Plan
☐ TCP or STAR Plan provided to field staff
☑ TCP or STAR Plan attached
☐ Other (specify):

ARCADIS Commercial Motor Vehicles (CMVs)

This section is applicable to ARCADIS operated vehicles only

☑ This project will **not** utilize CMV drivers
☐ This project will utilize CMV drivers

Site Control (*check all that apply*)

- [x] Not applicable for this project.
- [ ] Site control protocols are addressed in JSA or other supporting document (attach)
- [ ] Maintain an exclusion zone of _____ ft. around the active work area
- [ ] Site control is integrated into the STAR Plan or TCP for the project
- [ ] Level C site control - refer to Level C Supplement attached
- [ ] Other (specify):

Decontamination (*check all that apply*)

- [ ] Not applicable for this project.
- [ ] Decontamination protocols are addressed in JSA or other governing document (attach)
- [x] Level D work- wash hands and face prior to consuming food, drink or tobacco.
- [ ] Level D Modified work- remove coveralls and contain, wash hands and face prior to consuming food, drink or tobacco. Ensure footwear is clean of site contaminants
- [ ] Level C work - refer to the Level C supplement attached.
- [ ] Other (specify):

Sanitation *(check all that apply)*

- [x] Mobile operation with access to off-site restrooms and potable water
- [ ] Restroom facilities on site provided by client or other contractor
- [ ] Project to provide portable toilets (1 per 20 workers)
- [ ] Potable water available on site
- [ ] Project to provide potable water (assume 1 gal./person/day)
- [ ] Project requires running water (hot and cold, or tepid) with soap and paper towels

Safety Briefings (*check all that apply*)

- [x] Safety briefing required daily
- [ ] Safety briefing required twice a day
- [ ] Safety briefings required at the following frequency: _____
- [x] Subcontractors to participate in ARCADIS safety briefings
- [x] ARCADIS to participate in client/contractor safety briefings
- [ ] Other (specify):

Safety Equipment and Supplies

***Safety equipment/supply requirements are addressed in the JSA for the task being performed**. If work is not performed under a JSA, the following safety equipment is required to be present on site in good condition (Check all that apply):*

- [x] First aid kit
- [ ] Bloodborne pathogens kit
- [x] Fire extinguisher
- [ ] Eyewash (ANSI compliant)
- [x] Eyewash (bottle)
- [x] Drinking water
- [ ] Other: _____
- [x] Insect repellent
- [x] Sunscreen
- [ ] Air horn
- [x] Traffic cones
- [ ] 2-way radios
- [ ] Heat stress monitor

H&S Program (*check all that apply*)

- ☐ H&S metrics are provided on the account level, refer to account guidance
- ☑ TIP required at the following frequency on this project:
  Select One: _____ mhrs _____ time(s) _____ Define: 1 per quarter
- ☐ H&S Field Assessment required at the following frequency on this project:
  Select One: _____ mhrs _____ time(s) _____ Define: _____
- ☐ Other (specify):

List tasks anticipated for TIP activity:

TIP will be performed during groundwater
Groundwater monitoring activities

Signatures

I have read, understand and agree to abide by the requirements presented in this health and safety plan. I understand that I have the absolute right to stop work if I recognize an unsafe condition affecting my work until corrected.

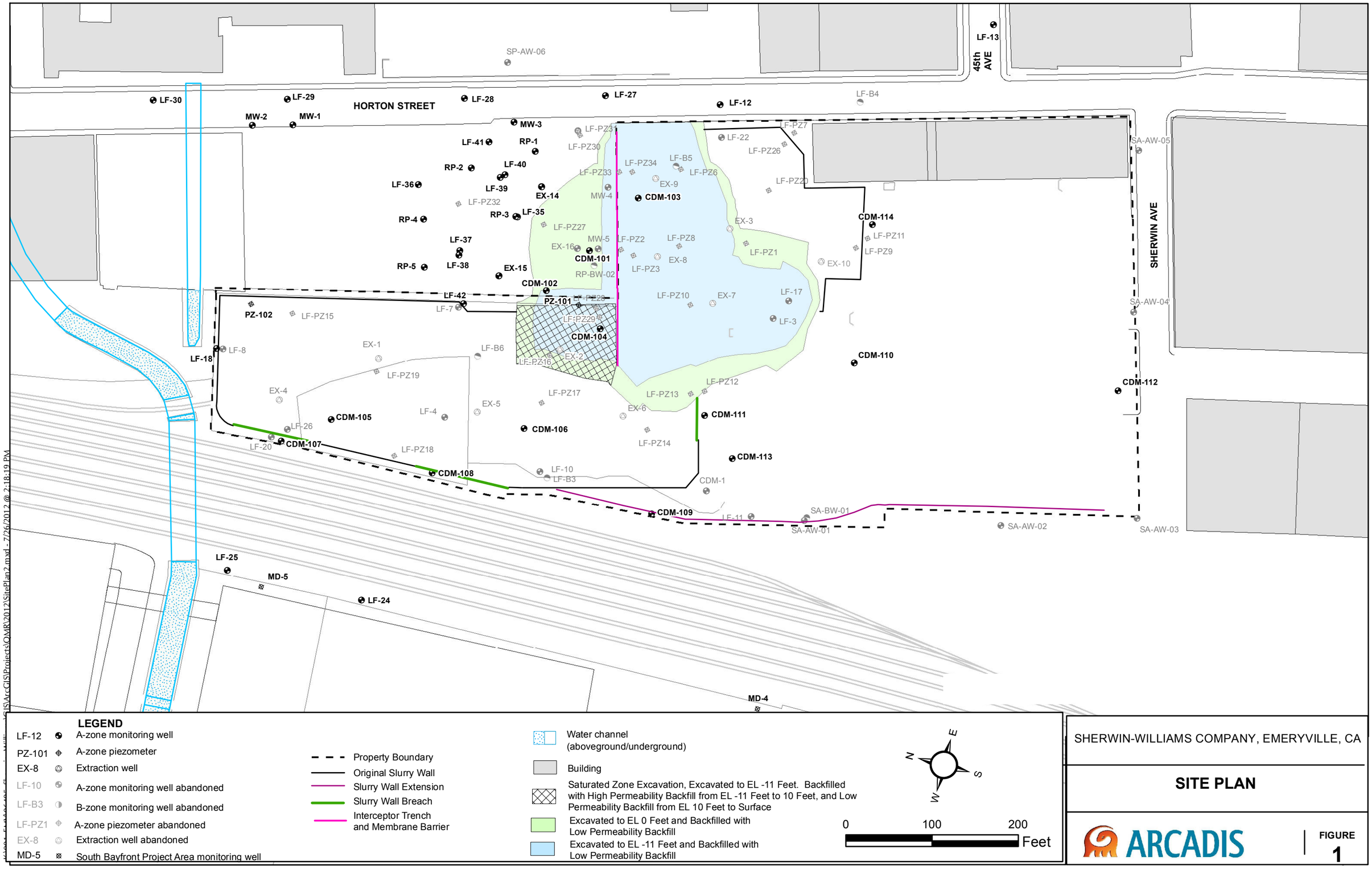
Printed Name	Signature	Date

Add additional sheets if necessary

- ☐ Subcontractor Acknowledgement Form attached

You have an absolute right to STOP WORK if unsafe conditions exist!

Attachments



LEGEND

LF-12	⊕	A-zone monitoring well
PZ-101	⊕	A-zone piezometer
EX-8	⊕	Extraction well
LF-10	⊕	A-zone monitoring well abandoned
LF-B3	◑	B-zone monitoring well abandoned
LF-PZ1	⊕	A-zone piezometer abandoned
EX-8	⊕	Extraction well abandoned
MD-5	⊠	South Bayfront Project Area monitoring well

- Property Boundary
- Original Slurry Wall
- Slurry Wall Extension
- Slurry Wall Breach
- Interceptor Trench and Membrane Barrier

- Water channel (aboveground/underground)
- Building
- Saturated Zone Excavation, Excavated to EL -11 Feet. Backfilled with High Permeability Backfill from EL -11 Feet to 10 Feet, and Low Permeability Backfill from EL 10 Feet to Surface
- Excavated to EL 0 Feet and Backfilled with Low Permeability Backfill
- Excavated to EL -11 Feet and Backfilled with Low Permeability Backfill

N E S W

0 100 200 Feet

SHERWIN-WILLIAMS COMPANY, EMERYVILLE, CA

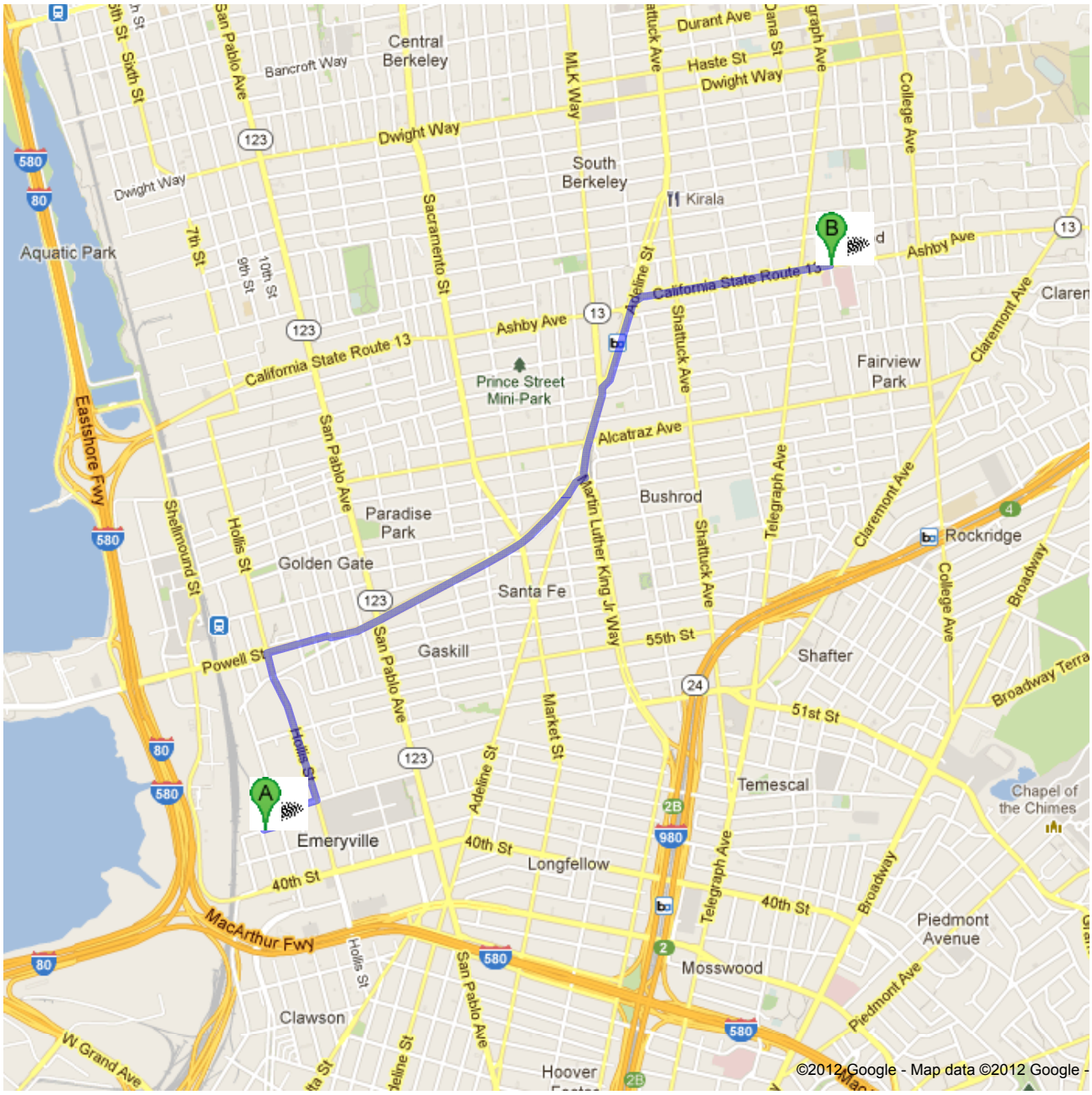
SITE PLAN

ARCADIS

FIGURE 1

I:\GIS\ArcGIS\Projects\OMR\2012\SitePlan2.mxd - 7/26/2012 @ 2:18:19 PM

Directions to Alta Bates Medical Center
2450 Ashby Avenue, Berkeley, CA 94705
3.0 mi – about **10 mins**



1450 Sherwin St, Emeryville, CA 94608

	1. Head **east** on **Sherwin St** toward **Horton St**	go 279 ft total 279 ft
	2. Turn left onto **Horton St**	go 200 ft total 479 ft
	3. Take the 1st right onto **45th St**	go 0.1 mi total 0.2 mi
	4. Take the 1st left onto **Hollis St** About 2 mins	go 0.5 mi total 0.7 mi
	5. Turn right onto **Powell St** About 54 secs	go 0.3 mi total 1.0 mi
	6. Continue onto **Stanford Ave** About 3 mins	go 0.8 mi total 1.8 mi
	7. Turn left onto **Adeline St** About 2 mins	go 0.6 mi total 2.4 mi
	8. Slight right at **down to Adeleine** onto **Ashby Ave/California State Route 13** Destination will be on the right About 2 mins	go 0.6 mi total 3.0 mi

Alta Bates Medical Center
2450 Ashby Avenue, Berkeley, CA 94705

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2012 Google

Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.

ARCADIS

HASP Addendum Page

This form should be completed for new tasks associated with the project. The project manager and/or task manager should revise the Project Hazard Analysis Worksheet with the new task information and attach to this addendum sheet. JLAs should be developed for any new tasks and attached as well.

Review the addendum with all site staff, including subcontractors, during the daily tailgate briefing, and complete the tailgate briefing form as required. Attach a copy of the addendum to all copies of the HASP including the site copy, and log in the Addendum Log Table A-1 on the next page.

Addendum Number: 2012 Revision 1 Project Number: EM002616

Date of Changed Conditions: 11/19/12 Date of Addendum: 11/19/12

Description of Change that Results in Modifications to HASP:

Update to new ARCADIS template. Groundwater extraction and treatment system no longer in operation

Signed: _____ Project Manager

Signed: _____ Site Safety Officer

Signed: _____ H&S Plan Writer

Signed: _____ H&S Plan Reviewer

Project Health & Safety Pre-Planning Form

This form will assist a project or task manager in the proper, proactive planning for H&S on a project or job task level. It can be used during the proposal stage of a project and during the pre-planning after project award. This does not take the place of a project HASP but can be used to help determine the contents of the project HASP.

Project Name:		Project Number:	Project Location:
Sherwin Williams Periodic Groundwater monitoring		EM002616	Emeryville, CA
Date:	**Duration:**	**Completed by:**	**Assisted by** (consult others when completing this form)**:**
11/19/2012		Erica Whiting	
Client:		**Client Contact:**	**Subcontractor companies:**
Sherwin Williams		Larry Mencin	

Think through the Tasks — TRACKing Project Planning

List the major jobs or activities for the project:

1 Water level measurements
2 collection of groundwater samples
3
4
5
6

Think through the Tasks — Other Hazardous Activities

☐ Check the box if there are any other ARCADIS, Client or other party activities that may pose hazards to ARCADIS operations

If there are none, write "None" here:

If yes, describe them here:

How could they be controlled?

Prework Authorization - check activities to be conducted that may require permit issuance or completion of a checklist or similar before work begins:

		Doc #			Doc #			Doc #
X	Not applicable		☐	Working at Height		☐	Confined Space	
☐	Energy Isolation (LOTO)		☐	Excavation/Trenching		☐	Hot Work	
☐	Mechanical Lifting Ops		☐	Overhead & Buried Utilities		☐	Other (may be client required)	

Consider the following (to help with appropriately and adequately resourcing the project)

☐ What level of HASP will be needed?	☐ Any unique H&S issues?	☐ Understand client requirements?
☐ Have subcontractors been qualified?	☐ Level of H&S support needed?	☐ Will we use subcontractors?
☐ Lessons learned from other jobs?	☐ Training Requirements?	☐ Audits and assessments budgeted?
		☐ Travel-related Issues / International?

Comments:

Recognize the hazards

Assess the Risks

Low, **M**edium, **H**igh - Use the drop down menu in the box to identify & rank risks applicable to the project. Examples are provided.

L Gravity (i.e., ladder, scaffold, trips)	M Motion (i.e., traffic, moving water) medium	L Mechanical (i.e., augers, motors)
L Electrical (i.e., utilities, lightning)	L Pressure (i.e., gas cylinders, wells)	L Environment (i.e., heat, cold, ice)
L Chemical (i.e., fuel, acid, paint)	L Biological (i.e., ticks, poison ivy)	L Radiation (i.e., alpha, sun, laser)
L Sound (i.e., machinery, generators)	L Personal (i.e. alone, night, not fit)	M Driving (i.e. car, ATV, boat, dozer)

Continue TRACK Process on Page 2

Control the hazards

Check all and discuss those methods to control the hazards to be considered for the project: Review the Hazard Assessment and previous work similar to this project. Discuss any additional control processes that should be considered.

[ ] Elimination	[ ] Substitution	[ ] Isolation
[ ] Engineering controls	[ ] Worker Rotation	[X] Exposure Monitoring
[ ] General PPE Usage	[ ] Hearing Conservation	[ ] Respiratory Protection
[X] Personal Hygiene	[X] Exposure Guidelines	[X] Decon Procedures
[ ] Emergency Action Plan (EAP)	[X] Fall Protection	[ ] Work Zones/Site Control
[ ] JLA to be developed/used ***(specify)***	[ ] LPOs	[X] Traffic Control
[ ] Training (see below)	[ ] Utility Clearance	[ ] Site Monitors
[X] Medical Surveillance (see below)	[ ] Work/Rest Regimes	[ ] Other ***(specify)***

Control the hazards — Training Requirements and Needs

Check what training is required for completion of the project. Consider the hazards to be encountered and whether ARCADIS staff or subcontractor staff will do the work. The H&S Training matrix found on the Training Center site will assist in this.

[X] Smith Hands-On	[ ] Full LPS	[ ] Client-Specific
[X] 40 Hour HazWoper	[ ] 24 Hour HazWoper	[ ] HazWoper Site Supervisor
[ ] 10 Hour OSHA Construction	[ ] 30 Hour OSHA Construction	[ ] Respiratory Protection
[X] PPE	[ ] Hazard Communication	[ ] RCRA
[X] First Aid/CPR	[ ] DOT/IATA Haz Mat	[ ] MSHA
[X] FRA / Railroad / eRailsafe	[ ] Bloodborne Pathogen	[ ] Confined Space (Awareness or Entry)
[ ] Lockout/Tagout (Hazardous Energy)	[ ] Utility Clearance	[ ] Electrical / Arc Flash
[X] Fire Extinguisher	[ ] Heat and Cold Stress	[ ] Fall Protection
[ ] Noise / Hear Conservation	[ ] Forklifts	[ ] Asbestos
[ ] H2S	[ ] Boating and/or Water Safety	[ ] Lead
[ ] Cadmium or other toxic metals	[X] Benzene	[ ] SPCC
[ ] Process Safety Management	[ ] Radiation Safety	[ ] Troxler / Nuclear Density Gauges
[ ] Other (Specify)	[ ] Other (Specify)	[ ] Other (Specify)

Control the hazards — Medical Surveillance Requiremants and Needs

Check what medical surveillance is required for completion of the project. Consider the hazards to be encountered and whether ARCADIS staff or subcontractor staff will do the work. The H&S group and WorkCare can assist in this determination.

[X] HazWoper Medical Exam	[ ] Respirator-related exam if not	[ ] Client-Specific
[ ] Drug and Alcohol (client-required)	[ ] Hearing test	[ ] Vaccinations to travel
[ ] Hepatitis B if providing 1st Aid/CPR	[ ] Other (Specify)	[ ] Other (Specify)

Control the hazards — Additional Comments about controlling the hazards on this project

Post Project Activities Review - Review at end of project (Check those applicable and explain:)

- [ ] Lessons learned / best practices learned: _____
- [ ] Incidents that occurred : _____
- [ ] Stop Work interventions? _____
- [ ] Corrective/Preventive Actions needed for future work: _____
- [ ] Any other H&S issues: _____

Keep H&S 1st in all things — Remember to Share any Lessons Learned through H&S Moments or Safety Shares

ARCADIS

Document Control Number:TGM - _____

TGM + *project number plus date as follows: xxxxxxxx.xxxx.xxxxx - dd/mm/year*

TAILGATE HEALTH & SAFETY MEETING FORM

This form documents the tailgate meeting conducted in accordance with the Project HASP. Personnel who perform work operations on-site during the day are required to attend this meeting and to acknowledge their attendance, at least daily.

Project Name:			**Project Location:**
Date:	**Time:**	**Conducted by:**	**Signature/Title:**
Client:		**Client Contact:**	**Subcontractor companies:**

TRACKing the Tailgate Meeting

Think through the Tasks (list the tasks for the day):

1 _____ 3 _____ 5 _____

2 _____ 4 _____ 6 _____

Other Hazardous Activities - Check the box if there are any other ARCADIS, Client or other party activities that may pose hazards to ARCADIS operations ☐ If there are none, write "None" here: _____

If yes, describe them here: _____

How will they be controlled? _____

Prework Authorization - check activities to be conducted that require permit issuance or completion of a checklist or similar before work begins:

	Doc #		Doc #		Doc #
☐ Not applicable		☐ Working at Height		☐ Confined Space	
☐ Energy Isolation (LOTO)		☐ Excavation/Trenching		☐ Hot Work	
☐ Mechanical Lifting Ops		☐ Overhead & Buried Utilities		☐ Other permit	

Discuss following questions (for some review previous day's post activities). **Check if yes :**

☐ Incidents from day before to review?	☐ Lessons learned from the day before?	☐ Any Stop Work Interventions yesterday?
☐ Any corrective actions from yesterday?	☐ Will any work deviate from plan?	☐ If deviations, notify PM & client
☐ JLAs or procedures are available?	☐ Field teams to "dirty" JLAs, as needed?	☐ All equipment checked & OK?
☐ Staff has appropriate PPE?	☐ Staff knows Emergency Plan (EAP)?	☐ Staff knows gathering points?

Comments: _____

Recognize the hazards (check all those that are discussed) (Examples are provided) and **Assess** the Risks (Low, Medium, High - circle risk level) - Provide an overall assessment of hazards to be encountered today and briefly list them under the hazard category.

☐ Gravity (i.e., ladder, scaffold, trips) (L M H)	☐ Motion (i.e., traffic, moving water) (L M H)	☐ Mechanical (i.e., augers, motors) (L M H)
☐ Electrical (i.e., utilities, lightning) (L M H)	☐ Pressure (i.e., gas cylinders, wells) (L M H)	☐ Environment (i.e., heat, cold, ice) (L M H)
☐ Chemical (i.e., fuel, acid, paint) (L M H)	☐ Biological (i.e., ticks, poison ivy) (L M H)	☐ Radiation (i.e., alpha, sun, laser) (L M H)
☐ Sound (i.e., machinery, generators) (L M H)	☐ Personal (i.e. alone, night, not fit) (L M H)	☐ Driving (i.e. car, ATV, boat, dozer) (L M H)

Continue TRACK Process on Page 2

TAILGATE HEALTH & SAFETY MEETING FORM - Pg. 2

Control the hazards (Check all and discuss those methods to control the hazards that will be implemented for the day): Review the HASP, applicable JLAs, and other control processes. Discuss and document any additional control processes.

☒	**STOP WORK AUTHORITY** (Must be addressed in every Tailgate meeting - (*See statements below*)		
☐	Elimination	☐ Substitution	☐ Isolation
☐	Engineering controls	☐ Administrative controls	☐ Monitoring
☐	General PPE Usage	☐ Hearing Conservation	☐ Respiratory Protection
☐	Personal Hygiene	☐ Exposure Guidelines	☐ Decon Procedures
☐	Emergency Action Plan (EAP)	☐ Fall Protection	☐ Work Zones/Site Control
☐	JLA to be developed/used ***(specify)***	☐ LPO conducted ***(specify job/JLA)***	☐ Traffic Control
☐		☐	☐ Other ***(specify)***
☐		☐	☐

Signature and Certification Section - Site Staff and Visitors

Name/Company/Signature	Initial & Sign in Time	Initial & Sign out Time	I have read and understand the

Important Information and Numbers

All site staff should arrive fit for work. If not, they should report to the supervisor any restrictions or concerns.

In the event of an injury, employees will call WorkCare at 1.800.455.6155 and then notify the field supervisor who will, in turn, notify Corp H&S at 1.720.344.3844.

In the event of a motor vehicle accident, employees will notify the field supervisor who will then notify Corp H&S at 1.720.344.3844 and then Corp Legal at 1.720.344.3756.

In the event of a utility strike or other damage to property of a client or 3rd party, employees will immediately notify the field supervisor, who will then immediately notify Corp Legal at 1.678.373.9556 and Corp H&S at

Visitor Name/Co - not involved in work

In	Out
In	Out
In	Out
In	Out

I will STOP the job any time anyone is concerned or uncertain about health & safety or if anyone identifies a hazard or additional mitigation not recorded in the site, project, job or task hazard assessment.

I will be alert to any changes in personnel, conditions at the work site or hazards not covered by the original hazard assessments.

If it is necessary to **STOP THE JOB,** I will perform **TRACK**; and then amend the hazard assessments or the HASP as needed.

I will not assist a subcontractor or other party with their work unless it is absolutely necessary and then only after I have done TRACK and I have thoroughly controlled the hazard.

Post Daily Activities Review - Review at end of day or before next day's work (Check those applicable and explain:)

- ☐ Lessons learned and best practices learned today: _____
- ☐ Incidents that occurred today: _____
- ☐ Any Stop Work interventions today? _____
- ☐ Corrective/Preventive Actions needed for future work: _____
- ☐ Any other H&S issues: _____

Keep H&S 1st in all things

WorkCare - 1.800.455.6155

Real Time Exposure Monitoring Data Collection Form

Document all air monitoring conducted on the Site below. Keep this form with the project file.

Site Name: _____ Date: _____

Instrument: _____ Model: _____ Serial #: _____

Calibration Method: (Material used settings, etc.)	
Calibration Results:	
Calibrated By:	

Activity Being Monitored	Compounds/Hazards Monitored	Time	Reading	Action Required? Y/N

Describe Any Actions Taken as a Result of this Air Monitoring and Why (does it match Table 5-1):

_____

_____

Employee Signature Form

I certify that I have read, understand, and will abide by the safety requirements outlined in this HASP.

Printed Name	Signature	Date

Subcontractor Acknowledgement: Receipt of HASP Signature Form

ARCADIS claims no responsibility for the use of this HASP by others although subcontractors working at the site may use this HASP as a guidance document. In any event, ARCADIS does not guarantee the health and/or safety of any person entering this site. Strict adherence to the health and safety guidelines provided herein will reduce, but not eliminate, the potential for injury at this site. To this end, health and safety becomes the inherent responsibility of personnel working at the site.

Printed Name	Company	Signature	Date

Visitor Acknowledgement and Acceptance of HASP Signature Form

By signing below, I waive, release and discharge the owner of the site and ARCADIS and their employees from any future claims for bodily and personal injuries which may result from my presence at, entering, or leaving the site and in any way arising from or related to any and all known and unknown conditions on the site.

Name	Company	Reason for Visit	Date/Time On Site	Date/Time Off Site

Hazardous Materials Transportation Form

	Vehicle (place X in box)	Type (pick-up, car, box truck, etc.)
Personal		
Rental		
ARCADIS owned/leased		
Government owned		
Trailer		

Materials Transported	Quantity	Storage/Transport Container

List Trained Drivers:

_____

_____

Hazardous Materials Shipment Form

Material Description and Proper Shipping Name (per DOT or IATA)	Shipment Quantity	DOT Hazard Classification	Shipment Method (air/ground)

List Shipper (i.e., who we are offering the shipment to):

_____

_____

List Trained Employee(s):

_____

_____

HAZARDOUS MATERIALS SHIPPING/TRANSPORTATION DETERMINATION FORM

Materials of Trade Template for use with the Standard HASP 8/10/2012

Date:	11/19/2012
Project Name:	Sherwin Williams
Project Number:	EM002616
Supplemental Information:	MSDS

Description of the Material to be Transported or Shipped:

Checked materials in the *HAZCOM* worksheet, *Monitoring* worksheet, *Safety Supplies and Equipment* section and *Level C Supplement* (if applicable) of the standard HASP for this project will be transported under the Materials of Trade Exception (49 CFR 143.6) in ARCADIS owned, leased or rented vehicles or vendor vehicles.

Special Instructions:

1) All containers will be maintained in an upright condition with lids or other openings secure. Containers will be protected against movement during transport and have adequate cushioning for protection
2) Cylinders will have valves removed during transport.
3) Batteries regardless of type or size, will have terminal protected and each battery will be protected from crushing, pressure or other condition that may affect the integrity of the battery.
4) Fire extinguishers will be mounted and secure in company owned or leased vehicles.

Limitations

1) No more than 440 pounds (combined gross weight) of materials subject to this shipping determination are permitted on a transport vehicle and individual container limits are specified in DOT Facts-108a and must not be exceeded. Gasoline, if transported, will be in metal safety cans no larger than 8 gallon capacity.
2) No more than 400 gallons of dilute Class 9 materials (<2% concentration) may be transported on a vehicle.
3) Materials that are radioactive or explosive are not eligible for MOT Exception and separate shipping determinations will be required for those materials.

References and Rationale for the Determination:

49 CFR 173.6 DOT Facts-108a
These materials are used in support of ARCADIS work.

Determination performed by: Erica Whiting

Determination QA/QC performed by: Ron Goloubow

Site Traffic Awareness and Response (STAR) Plan
Revision 1, 1/3/2011

1.0 General

Project Name:	Sherwin Williams Emeryville
Project Number:	EM002616
STAR Plan Developer Name:	Erica Whiting
Reviewed By:	Ron Goloubow
Duration of Work (hours or days):	8 hr days
Time Restrictions (describe below):	Daylight

Comments:

Day Light Savings time is in effect; Sunset is around 4:30 PM. Please plan accordingly.

2.0 Work Description

Modify the following statement as appropriate:
Site is a former paint factory and adjacent parking lot for local business. Groundwater monitoring including water level gauging and collection of groundwater samples will occur within site boundary, and adjacent Rifkin Parking lot where individuals may encounter moving cars in parking lot. Additionally, a few monitoring wells are on public streets.

☐ Work is planned on off site properties but not in the public right-of-way.

To facilitate identification of traffic controls to use, check all that apply to this project:

Short Duration Work (<1 hour)

- ☑ Water-level gauging and well sounding
- ☐ Surface soil sampling using manual methods
- ☐ Intermediate depth soil sampling using DPT
- ☑ Shallow monitor well purging and sampling
- ☐ Product recovery using manual methods
- ☐ Surveying
- ☐ Other (specify):

Intermediate Duration Work (1-8 hours)

- ☐ Intermediate/deep or > 2 in. diameter well sampling
- ☐ Slug testing and similar tests
- ☐ Deep handauger sampling (>20 ft depth)
- ☐ Manual soil sampling through concrete/asphalt
- ☐ Deep soil sampling using DPT (>40 ft depth)
- ☐ Soil sampling using other automated drilling method
- ☐ Other (specify):

Long Duration Work (>8 hours)

- ☐ Deep monitor well installation (>50 ft depth)
- ☐ Monitor wells with surface casing installation
- ☐ Intermediate depth monitor wells ≥ 4 in. diam.
- ☐ Long term product recovery using equipment
- ☐ Long term pump testing
- ☐ Other (specify):

Comments:

Traffic Type:
Check all that apply:

- ☑ Automobiles
- ☑ Straight truck
- ☑ Semi truck
- ☐ Other:
- ☐ Forklifts
- ☑ Bicycles
- ☑ Pedestrian
- ☐ Construction equipment

3.0 Traffic Control Layout

The following DOT Fact Sheets and/or configurations are applicable to this project:
Notes: DOT Fact Sheets have numbered scenarios, select the appropriate scenario(s) for the project and indicate duration [Short (S), Intermediate (I), Long (L)]. Manually revise diagrams, if needed to convey requirements.

		1 2 3 4 5 6 7 8 9	S	I	L
☐	DOT Facts-302a Retail Gas Station/Small Business Parking Lot (<1 Hour)				
☐	With Truck ☐ Without Truck	☐☐☐☐☐			
☐	DOT Facts-302b Retail Gas Station/Small Business Parking Lot (1-8 Hours)	☐☐☐☐			
☐	DOT Facts-302c Retail Gas Station/Small Business (>8 Hours)	☐☐☐			
☐	DOT Facts-302e Multi-business Parking Lot	☐☐☐☐☐☐☐☐☐	☐	☐	☐
☑	DOT Facts-302e Facility Parking Area	☐☐☐☐☐☐☐☐☐	☐	☑	☐
☐	Parking Garage (develop drawing for controls)				
☐	Other (specify): _____				
☐	Controls to the right will be used (copy and paste from STAR Select)				

How will the above documents be communicated to field staff? (excludes STAR Select)

☐ The above documents are attached to this STAR Plan
☐ The above documents are appropriate without significant modification and are available to field staff in the

Field Guide for Roadway Work Zone Safety.

4.0 Required Traffic Control Devices and Phasing

Tasks on this project may be implemented both individually or concurrently. Selection and number of traffic control devices required will be dependent on the scope of work. In all cases, a minimum of 4 x42 inch channelizer cones with flags will be available on site for any field work. Based on recommendations in DOT Fact Sheet applicable to the work being performed, indicate any additional traffic control devices for the current project below.

Traffic control device help: DOT Facts-302d

Check all that apply:	Number:
☐ Channelizer cone (42 inch height, 10 lb base)	
☐ Channelizer cone (42 inch height, 30 lb base)	
☑ Traffic cones (≥ 18 inches tall)	6
☐ Barricade ☐ Type I ☐ Type II	
☐ Flags for cones	
☐ Lights (for night work)	
☐ Plastic fencing (rolls)	
☐ Caution tape (rolls)	
☐ Other (specify): _____	

Phasing:
1) Position truck as shield, if practical
2) Deploy traffic control devices
3) Affix flags, caution tape or fencing as prescribed in fact sheet
4) Unload project equipment
5) Commence work
6) SSO to maintain controls
7) Remove controls in opposite order

☐ Additional client requirements are attached

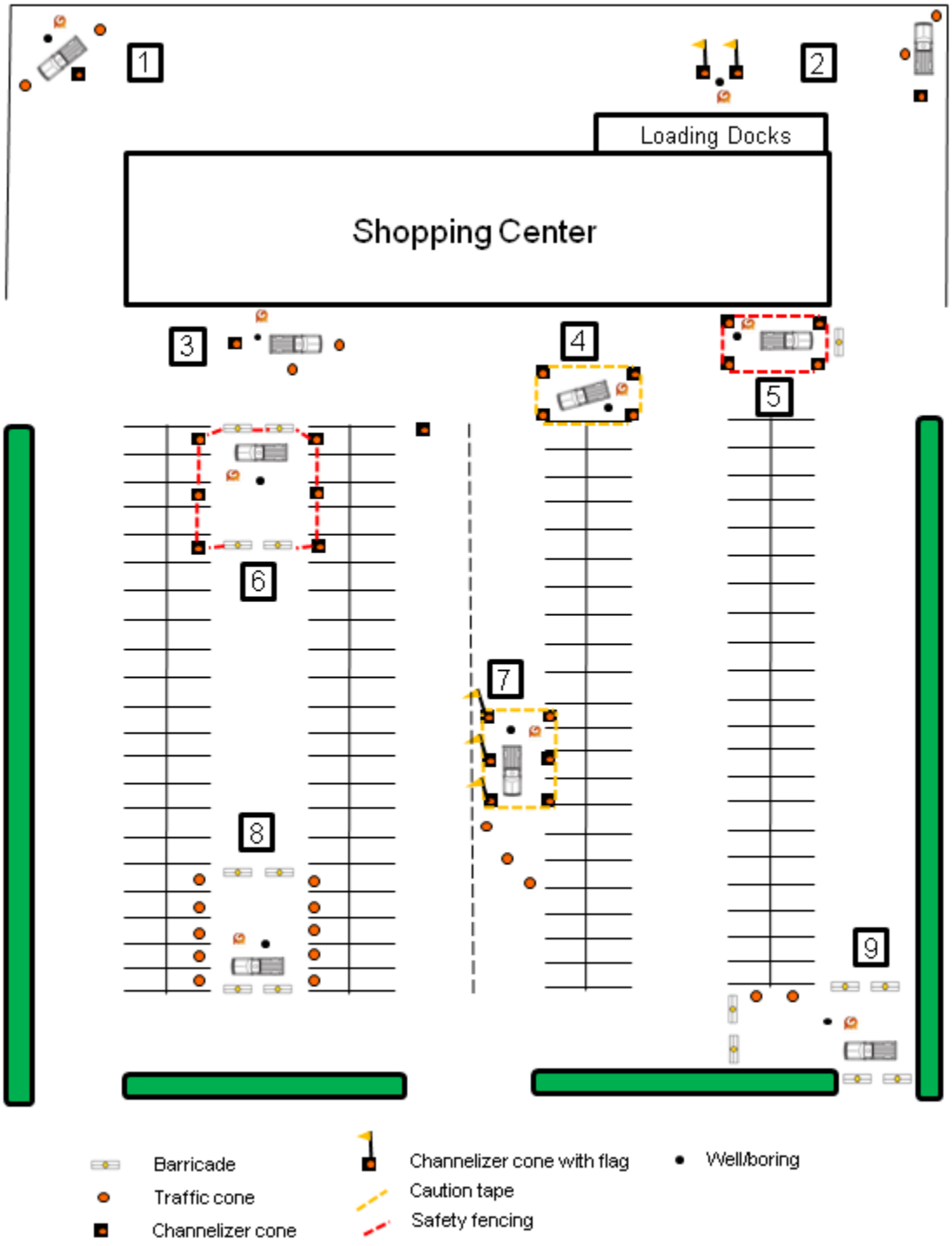
If vehicle equipped with high intensity strobe or rotating lights, the lights should be utilized during work. If the vehicle is not equipped with supplemental lighting devices, use vehicle flashers (be aware of battery drain when using any of the lighting devices).
Personal protective equipment required for this work is listed in the applicable project Job Loss Analysis (JLA) or project specific HASP. A Class II (minimum) high visibility vest is required.

5.0 Approvals

	Printed Name	Date	Signature
Plan Developer:	Erica Whiting	11/19/2012	
Plan Reviewer:	Ron Goloubow	11/25/2012	

DOT Facts-302e
Recommended Best Practices for Multiple Business and Large Facility Parking Areas

The following configurations should be considered for traffic protection in retail parking areas for multiple businesses (strip malls, etc) and large facility parking lots.



Revision 1, 1/15/10

General Guidelines for Safety:

- **Use the vehicle as a shield when possible. Orient the rear of the ARCADIS vehicle away from site entrances and areas of increased backing or movement of other vehicles, when practical. Traffic cones used in scenarios above in conjunction with the parked vehicle should be consistent with the ARCADIS Cone and Spotter Program (see ARC HSGE-024 for more information)**
- **All channelizer cones shall be at least 42 inches in height**
- **Always work facing the area with greatest traffic movement and least protection**
- **Always assume vehicles will move in either direction (frontwards or backwards)**
- **Always use TRACK to predict traffic movement and stage vehicle and Control Zones in manner that offers protection without impairing site entrance or blocking access to loading docks when possible. STAR Plan requirements should be reviewed against HASP exclusion zone requirements for consistency.**
- **If there is a perceived drivable space or if there is an unused parking space, you must assume that someone will attempt to access or drive to/through the location. Plan, deploy and work accordingly. Block off parking spaces with cones during off hours to ensure no vehicles will occupy the planned work zone.**
- **Class II high visibility vest (minimum) to be worn at all times (refer to HASP or JLA for additional requirements, if any).**
- **Discuss with site operator or manager times of lower traffic volume and attempt to schedule work activity during traffic lulls. When working near dumpsters and loading docks find out when the dumpsters are emptied and avoid loading docks during planned delivery times.**
- **Warning lights shall be used for night work on both the channelizer drums and barricades, if used. Cones used during night work for taper purposes must have retroflective tape.**
- **Areas in green above may appear to be site property but may actually be within the roadway right-or way. Work performed in the right-of-way has additional requirements. See ARC DOT-301 for more information.**

Scenario Descriptions:

1) **Locations to the rear of strip malls and similar operations generally have low traffic volume and low pedestrian activities. Use the truck as a shield to the extent possible and deploy channelizer cone in direction of expected traffic exposure. This scenario may be used for short duration (< 1 hour) and intermediate duration (1-8 hours) daylight work activities. Since deliveries by larger vehicles are generally performed during night hours, long duration (>8 hours) and night time work should employ recommendations described in scenario #5 below, even in these low traffic areas.**
2) **Locations near loading docks involve large vehicle backing with limited visibility. Tight space and work zone proximity to other active operations may preclude the use of the vehicle as a shield in these areas. Work in these areas should use channelizer cones with flags to increase work zone awareness even if the vehicle is being used as a shield. When backing activities are occurring, work should be suspended and employees should leave the area until the backing operations are complete (leaving the traffic control devices in place).**
3) **Short duration work (<1 hour) in high traffic and pedestrian areas should use the vehicle as a shield with the front of the vehicle facing oncoming traffic. A channelizer cone should be deployed in the vicinity of the work zone near the ARCADIS employee's work area**
4) **Intermediate duration work (1-8 hours) in high traffic and pedestrian areas should use the vehicle as a shield with the front of the vehicle facing oncoming traffic. The work zone**

should be defined with channelizer cones (10 pound base weight recommended) and caution tape. Leave sufficient space to allow access to all areas of the vehicle.

5) **Long duration work (> 8 hours) and night work in high traffic and pedestrian areas should use the vehicle as a shield with the front of the vehicle facing oncoming traffic. Utilize standard orange plastic safety fencing and channelizing cones (30 pound base weight recommended) to delineate the work zone. Use of lighted barricades (Type I or II preferred) on the end facing oncoming traffic is recommended, if work is performed near site entrances.**
6) **Complete lane closure in areas of higher traffic and pedestrian flow should utilize barricades (Type I or II preferred) in sufficient number to clearly indicate the lanes are closed. Signs may be used in conjunction with the barricades to further communicate the closure. Channelizer cones should be used in conjunction with caution tape (intermediate duration) and safety fencing (long duration) closure. Place the vehicle as a shield in the area of highest exposure to traffic (at the lane entrance end as shown in the example above) and create adequate buffer zone on the end with lower traffic exposure.**
7) **Large parking areas may have a central thoroughfare leading to a red light at the city street. These areas may have increased traffic control, have wider lanes and traffic may drive in these areas at higher speeds. Work zones in these areas should use the vehicle as a shield with the front of the vehicle facing oncoming traffic. Channelizer cones should be used in conjunction with caution tape (intermediate duration) and safety fencing (long duration) lane closure. If parking spaces across the lanes are useable, use flags with the channelizer cones to increase awareness of the work zone to backing drivers. A taper, using standard traffic cones, may be used to help control traffic control through the area. If these locations have high volumes of traffic, consider using flaggers.**
8) **Work zones away from the active business area of the site and having low traffic and pedestrian flow may be configured using lesser requirements. Use barricades (Type I or II preferred) to close lanes and orient vehicle as a shield in the area of highest traffic exposure. Create a buffer between the work area and the area of lesser traffic exposure. Standard traffic cones may be used to delineate the work zone. Use of this scenario requires an understanding of traffic flow and patterns throughout the planned duration of the work activity. If conditions change, use of controls as described in scenario #6 should be used.**
9) **Complete lane closure involving an entrance should rely on barricades as the primary method of traffic control. Type I, II or III barricades should be used at the site entrance (Type III if the entrance has high traffic volume) for both intermediate and long duration work. Type I or II barricades are recommended for lane closures. Use the vehicle as a shield in the area of highest traffic exposure (usually the entrance). If vehicle or pedestrian traffic is persistent or heavy, controls using caution tape or safety fencing should be employed in conjunction with additional barricades or channelizer cones.**



Traffic Control Plan

Revision 1, January 6, 2011

1.0 General

Project Name:	Sherwin Williams
Project Number:	EM002616
TCP Developer Name:	Erica Whiting
Engineering Judgment (EJ) Review By[1]:	Ron Goloubow
Duration of Work (hours or days):	2 hours
Roadway Work Zone Start Point	Horton street and Sherwin Avenue
Roadway Work Zone End Point	Horton Street past Rifkin Lot
Posted Speed Limit (roadway)	25 mph
Number of Lanes (each direction)	1
Time Restrictions (describe below)[2]:	none

Comments:

1) Need help evaluating 3rd Party TCPs? 3rd Party TCP Evaluation Process

2) Coordinate with site operator on delivery times, dumpster emptying times, etc. to avoid problems.

2.0 Work Description

Modify the following statement as appropriate:

Work will include groundwater gauging and sampling at monitoring wells on 45th avenue, and horton street.

Check all that apply:

- ☐ Work is planned on off-site properties.
- ☐ TCP was developed by a 3rd party on behalf of and under contract to ARCADIS, see attached.
- ☐ Regulatory permit/authorization attached.

To facilitate identification of traffic controls to use, check all that apply to this project:

STAR Short Duration Work (<1 hour)	STAR Intermediate Duration Work (1-8 hours)
☑ Water-level gauging and well sounding	☐ Intermediate/deep or >2 in. diameter well sampling
☐ Surface soil sampling using manual methods	☐ Slug testing and similar tests
☐ Intermediate depth soil sampling using DPT	☐ Deep handauger sampling (>20 ft depth)
☑ Shallow monitor well purging and sampling	☐ Manual soil sampling through concrete/asphalt
☐ Product recovery using manual methods	☐ Deep soil sampling using DPT (>40 ft depth)
☐ Surveying	☐ Soil sampling using other automated drilling method
☐ Other (specify):	☐ Other (specify):

STAR Long Duration Work (>8 hours)

- ☐ Deep monitor well installation (>50 ft depth)
- ☐ Monitor wells with surface casing installation
- ☐ Intermediate depth monitor wells ≥ 4 inch diameter
- ☐ Long term product recovery using equipment
- ☐ Long term pump testing
- ☐ Other (specify):

Roadway Work Type (*check all that apply*):

- ☐ Off shoulder
- ☐ On shoulder
- ☐ Travel lane
- ☐ Other:
- ☐ Turn lane
- ☐ Intersection
- ☐ Sidewalk
- ☐ Mobile operation
- ☐ Road closure
- ☐ Bicycle lane
- ☐ See attached TCP

STAR (*check all that apply*):

- ☑ Automobiles
- ☑ Straight truck
- ☑ Semi truck
- ☐ Other:
- ☐ Forklifts
- ☑ Bicycles
- ☑ Pedestrian
- ☐ Construction equipment

3.0 Traffic Control Layout

The following are applicable to this project:

Notes: DOT Fact Sheets have numbered scenarios, select the appropriate scenario(s) for the project and indicate duration [Short (S), Intermediate (I), Long (L)]. Manually revise diagrams, if needed to convey requirements.

STAR

1 2 3 4 5 6 7 8 9 S I L

- ☐ DOT Facts-302a Retail Gas Station/Small Business Parking Lot (<1 Hour)
  - ☐ With truck ☐ Without truck
- ☐ DOT Facts-302b Retail Gas Station/Small Business Parking Lot (1-8 Hours)
- ☐ DOT Facts-302c Retail Gas Station/Small Business (>8 Hours)
- ☐ DOT Facts-302e Multi-business Parking Lot
- ☐ DOT Facts-302e Facility Parking Area
- ☐ Parking Garage (develop drawing for controls)
- ☐ Other (specify):
- ☐ Controls to the right will be used (copy/paste from STAR Select)

Roadway

- ☐ DOT Facts-301i Off Shoulder Work
- ☐ DOT Facts-301j On Shoulder Work
- ☐ DOT Facts-301k On Shoulder Mobile or Short Duration Work
- ☐ DOT Facts-301m On Shoulder Work with Minor Encroachment
- ☐ DOT Facts-301n Lane Closure, 2 Lane Road, with Flagger
- ☑ DOT Facts-301o Lane Closure, 2 Lane Low Volume Road
- ☐ DOT Facts-301p Temporary Road Closure
- ☐ DOT Facts-301r Work in Center of Low Volume Road
- ☐ DOT Facts-301t Lane Closure on Urban Minor Street
- ☐ NA Major Intersection, High Volume Road (attach drawing)
- ☐ NA Lane Closure, Urban High Volume Street (attach drawing)
- ☐ DOT Facts-301u Other Atypical Application (attach drawing)

TRACK

How will the above documents be communicated to field staff?

- ☑ The above documents or modified documents are attached to this TCP, and/or
- ☐ The above documents are appropriate without significant modification and are available to field staff in the Field Guide for Roadway Work Zone Safety. (Read printing instructions)

4.0 Required Traffic Control Devices and Phasing

Modify statements as appropriate:

STAR Tasks:

Tasks on this project may be implemented both individually or concurrently. Selection and number of traffic control devices required will be dependent on the scope of work. In all cases, a minimum of 4 x 42 inch channelizer cones with flags will be available on site for any field work. Based on recommendations in DOT

Fact Sheet(s) applicable to the work being performed, indicate any additional traffic control devices for the current project below.

Roadway Tasks:

Regardless of TCP responsibility for this project, all ARCADIS vehicles in a RWZ will, at a minimum, have a functioning high intensity strobe or rotating orange light. All ARCADIS employees in the RWZ will wear, at a minimum, a retroflective high visibility vest meeting Class II or III requirements and other PPE required by JLA or HASP. ARCADIS employees will not enter a 3rd party RWZ if observed to be deficient or inconsistent with the ARCADIS RWZ Safety Program.

ARCADIS RWZ requirements stipulated in this TCP from above selected DOT Fact Sheet(s) or through attached document require the following traffic control devices to be present on site during work in the roadway or right-of-way:

Need sign help?	DOT Facts-301d	Need help determining cone needs:
Need channelizing device help?	DOT Facts-301e	ARCADIS Cone Calculator
Need Flagger help?	DOT Facts-301f	
View Flagger training requirements by state:	DOT Facts-301w	

Check all that apply:	*Wording or Pictogram*	*Number:*
☑ Warning signs	road work ahead	1
☐ Warning signs		
☐ Warning signs		
☐ Stop/Slow paddle		
☐ Red flag		
☐ Drums		
☑ Channelizer cone (42 inch height, 10 lb base)		4
☐ Channelizer cone (42 inch height, 30 lb base)		
☐ Traffic cones (≥ 18 inches tall)		
☐ Barricade ☐ Type I ☐ Type II		
☑ Flags for cones		4
☐ Lights (for night work)		
☐ Plastic fencing (rolls)		
☐ Caution tape (rolls)		
☐ Other (specify):		

STAR Phasing:

1) Position truck as shield, if practical
2) Deploy traffic control devices
3) Affix flags, caution tape or fencing as prescribed in fact sheet
4) Unload project equipment
5) Commence work
6) SSO to maintain controls
7) Remove controls in reverse order

TCP Phasing:

1) Deploy warning signs at first approach, if required
2) Deploy subsequent approach warning signs, if required
3) Deploy channeling devices, if required, starting with first approach
4) Deploy "End Road Work" signs, if required
5) Position vehicle as shield to the extent practical
6) Commence work, SSO or designated contractor to maintain devices
7) Remove devices in reverse order

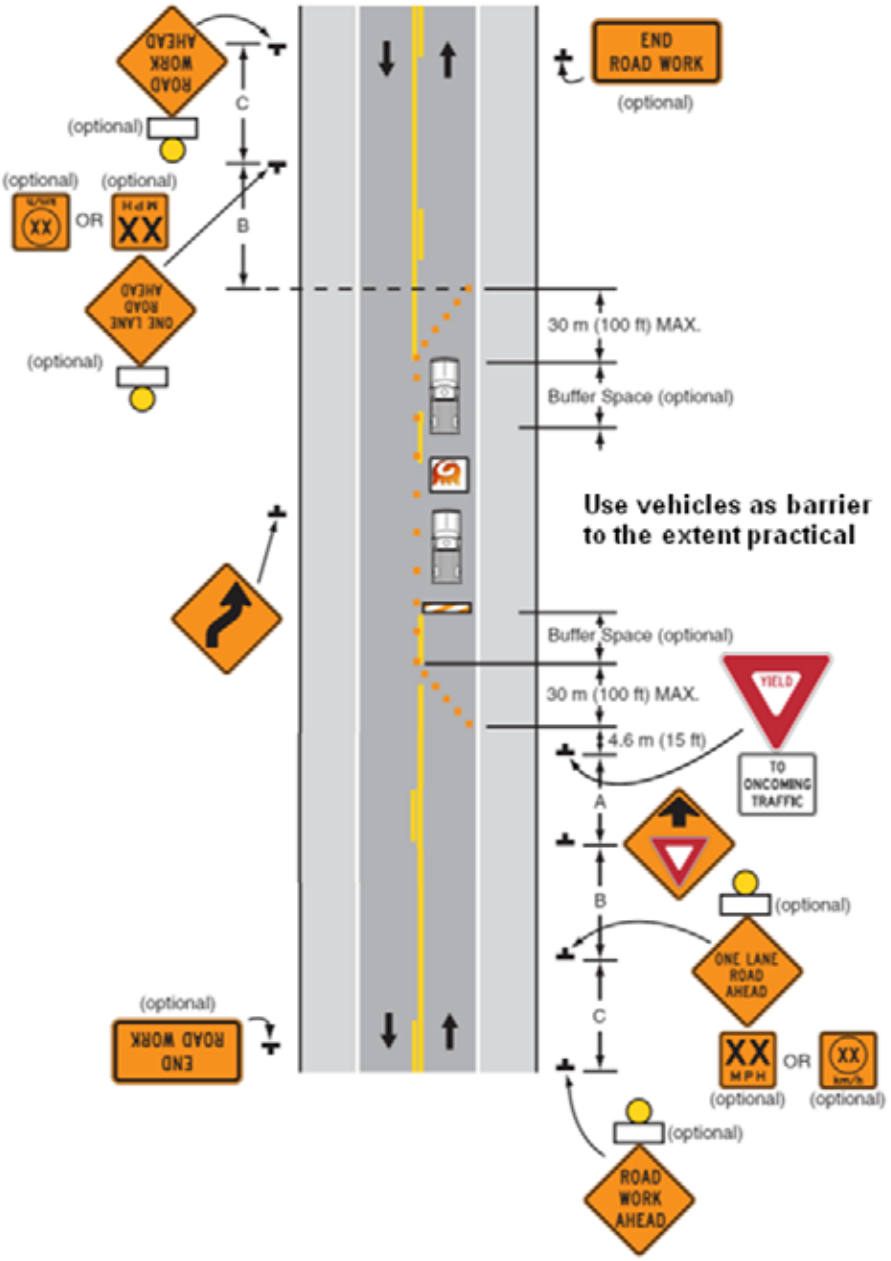
5.0 Approvals

	Printed Name	Date	Signature
Plan Developer:	Erica Whiting	11/19/2012	
Reviewer:	Ron Goloubow	11/25/2012	
☐ EJ signature on attached TCP			

You have the absolute right to stop work if unsafe conditions exist!

DOT Facts-301o
Lane Closure on Two-Lane Road with Low Traffic Volumes

The following configuration may be used for lane closure on two-lane roads with low traffic volumes:



Road Type	"A" (m/ft)	"B" (m/ft)	"C" (m/ft)
Urban (Low Speed)	30/100	30/100	30/100
Urban (High Speed)	100/350	100/350	100/350
Rural	150/500	150/500	150/500

Guidance:

G1. This RWZ application may be used as an alternate to the RWZ application shown in DOT Facts-301n (using flaggers) when the following conditions exist:

a. Vehicular traffic volume is such that sufficient gaps exist for vehicular traffic that must yield.

b. Road users from both directions are able to see approaching vehicular traffic through and beyond the work site and have sufficient visibility of approaching vehicles.

G2. The Type B flashing warning lights may be placed on the ROAD WORK AHEAD and the ONE LANE ROAD AHEAD signs whenever a night lane closure is necessary.



Job Safety Analysis

General

JSA ID		**Status**	(1) Intitial
Job Name	Environmental-Other	**Created Date**	11/19/2012
Task Description	Driving	**Completed Date**	
Template		**Auto Closed**	

Client / Project

Client	The Sherwin Williams Company
Project Number	EM002616
Project Name	Sherwin Williams Emeryville
PIC	Michael Paczkowski
Project Manager	Lucas Goldstein

User Roles

Role	Employee	Due Date	Completed Date	Supervisor	Active
Developer	Erica Whiting			Lucas Goldstein	☑
HASP Reviewer	Ron Goloubow				☑
Quality Reviewer					☑

Job Steps

Job Step No.	Job Step Description		Potential Hazard	Critical Action	H&S Reference
1	Performing Pre-trip inspections	1	Cuts scrapes to hands and fingers checking engine fluids	Use Track to plan inspection activity in the engine compartment. Wear protective gloves if reaching in poorly illuminated areas of the engine	
		2	Pinch crush hazards to hands and fingers checking engine fluids or closing doors.	Identify and keep hands fingers away from pinch hazards from doors and vehicle hood or tailgate (if present).	
		3	Awkward body positions checking tires, spare tire, undercarriage, or engine compartment	Maintain neutral body positions and avoid awkward reaches under the vehicle or in engine compartment	
		4	Failure to inspect vehicle emergency equipment may result in extensive vehicle damage or delay treatment in the event of injury	Conduct equipment inspections by visibly inspecting fire extinguisher and first aid kit for cleanliness, in date items/tags, readiness for use.	
2	Vehicle loading and unloading	1	Object placement obstructing rear, side or blind spot view.	Avoid placing objects in a manner that obstructs your view, brake equipment down to a smaller more manageable size to keep low profile in vehicle, If hanging clothes in vehicle, place in manner that does not obstruct blind spots.	
		2	Unsecure objects causing pedal, steering or gear shift obstruction or injury during vehicle operation	Secure all loads in vehicle (both in the bed of trucks and in passenger cabin) to prevent unanticipated movement or shifting that could injure driver, passenger or affect safe operation of vehicle	
		3	Obstruction of vehicle safety equipment caused by object placement in vehicle	Keep emergency equipment clear and unobstructed to ensure ready availability.	
3	Vehicle operation	1	Failure to use Smith System “5-Keys” increases risk of accident	Use Smith System “5-Keys”. Maintain space cushion around vehicle, maintain 4 second rule and add (second for each additional hazard (wet loads, snow, etc) Brake gradual, keep eyes moving, check mirrors every 6-8 seconds, use turn signals, focus on relevant objects. Use early lane positioning when approaching turns.	

		2	Injury or death from failure to wear seatbelt	Always wear seatbelts even if driving short distances off of a public roadway.	
		3	Cell phone use increase risk of accident and injury	Avoid using cell phones in any capacity when operation a vehicle, check client for cell use on project sites and follow requirements. Follow all local laws	
		4	Use of radar detectors encourages speeding and resulting in increased risk for accident or injury	Use of radar detectors and similar devices is prohibited	
4	Routine maintenance	1	Pinch crush hazards to hands and fingers replacing engine fluids or closing doors/hood.	Inspect and identify pinch and crush hazards and keep hands/fingers clear when closing hood, tailgates, or doors.	
		2	Burn hazards to hand from checking/replacing fluids in engine compartment	When practical allow engine to cool prior to servicing or adding fluids. Use protective gloves.	
		3	Vehicle damage from improper fuse replacement	Never replace a fuse with higher amperage than the one being replaced. Only replace fuses of the being replaced	

Supplies

Type	Supply	Description	Required
Communication Devices	mobile phone		Required
Miscellaneous	fire extinguisher		Required
	first aid kit		Required
Traffic Control	Other	Roadway Emergency Kit	Required

Review Comments

Reviewer		Comments
Employee: **Role** **Review Type** **Completed Date**		
Employee: **Role** **Review Type** **Completed Date**		
Employee: **Role** **Review Type** **Completed Date**		

Job Safety Analysis

General

JSA ID		**Status**	(1) Intitial
Job Name	Environmental-Drum sampling/handling	**Created Date**	11/19/2012
Task Description	Drum Handling and Sampling	**Completed Date**	
Template		**Auto Closed**	

Client / Project

Client	The Sherwin Williams Company
Project Number	EM002616
Project Name	Sherwin Williams Emeryville
PIC	Michael Paczkowski
Project Manager	Lucas Goldstein

User Roles

Role	Employee	Due Date	Completed Date	Supervisor	Active
Developer	Erica Whiting			Lucas Goldstein	☑
HASP Reviewer	Ron Goloubow				☑
Quality Reviewer					☑

Job Steps

Job Step No.	Job Step Description		Potential Hazard	Critical Action	H&S Reference
1	Inspect Drums for signs of Bulging, Leaking, Crystals, Temperature, and Odor	1	Exposure to chemicals stored in drum or container.	Read drum labels for information about contents. Review all relevant MSDSs about chemical contents. If labels are not attached, call PM or Local H&S Representative.	None
		2	Contents of the drum can cause fire/explosion hazard.	Use air monitoring meters to screen drums. % LEL and VOCs (PPM). If either of the values are above the action levels described in the HASP or MSDS then Stop Work, move away from the area, and reassess the situation. Call PM and H&S staff for support.	
2	Remove lids or bungs from Drums	1	Hand Injuries can occur from sharp edges, pinch points, and from use of hand tools.	Wear appropriate work gloves. When removing ring from drum, fingers can get pinched between ring and drum. Keep fingers clear of this space. Select proper tool for task. If large amount of drums will be encountered, use a speed or drum wrench.	Employee H&S Field book, Section III Subpart II, page 104. Also Section III Subpart L, page 38.
		2	Rapid depressurization from empty or partially full drums can cause flying parts or volatile COCs releasing on staff.	Do not handle or open bulging drums (contact Corp H&S for assistance). Bleed any built up pressure by carefully loosening bung prior to removing ring. Keep face and arms away from bung opening when loosening. Slightly lift lid, insert end of air monitoring device to monitor air inside drum.	
		3	Use of mechanical tools to remove bolts from drum lids causes excessive noise.	Wear hearing protection.	
		4	Splashing can occur if filling drum, or collecting samples.	Wear eye and face protection. Pour liquids into drum slowly to minimize splashing.	
		5	When working with COCs that have fire/explosive properties, sparking or heat could cause fire/explosion.	Use brass or non Spark Hand Tools if such a hazard exists or is suspected.	
3	Sample Contents from Drums	1	Exposure to COCs can occur by contacting impacted contents.	Select proper dermal protection for task, at a minimum nitrile gloves should be worn. Wear appropriate eye face and body protection as outlined in the HASP.	

		2	Staff can be exposed to chemical vapors/fumes when sampling.	Conduct air monitoring as outlined in the HASP, and if required, select appropriate respiratory protection for the task.	
		3	Sharp edges and broken sample containers can cause lacerations.	Discard any broken sample ware or glass properly. Do not over tighten sample containers.	
		4	Chemical burns or skin irritation can occur from contact with sample preservatives.	Wear chemical protective gloves when collecting samples, or when handling damaged sample containers.	
4	Replace drum lids	1	Hand Injuries can occur from sharp edges, pinch points, and from use of hand tools.	see step 2 above	
5	Moving and Storing Drums	1	Drum storage areas can be accessed by the general public, or may not be secure.	Calculate how many drums will be stored in new location. Ensure that drums are not easily accessed by the general public. Do not store such that drums impede pedestrian or vehicular traffic.	
		2	Muscle strain can occur when lifting/pulling/pushing drums.	Drums that are full can weigh as much as 800 lbs. Use a lift assist device whenever possible, and use a team lift approach. When moving soil drum generated by drilling, have drillers use their equipment to move the drums. Using dolly, slightly lift drum away from dolly to install forks under drum. Slowly let drum come back down and rest on dolly. Using hook on top of dolly, ensure it latches on top of drum bung.	
		3	Body parts can be pinched between lift device, or drum and the ground.	Be aware of hand and foot placement during drum staging. Do not hurry through task.	
		4	When moving, the drum can tip or the dolly could become unstable from uneven ground surface.	Plan travel route with drum prior to moving. With drum secure on dolly, have one employee pull back on dolly, and other employee slowly push back on drum toward dolly. Have second worker act as spotter for traffic, pedestrians, and any trip hazards along the way.	

PPE — Personal Protective Equipment

Type	Personal Protective Equipment	Description	Required
Eye Protection	safety goggles		Required
Hand Protection	chemical resistant gloves (specify type)	Nitrile	Required
	work gloves (specify type)		Required

Supplies

Type	Supply	Description	Required
Miscellaneous	Other	dolly	Required

Review Comments

Reviewer		Comments
Employee: **Role** **Review Type** **Completed Date**		
Employee: **Role** **Review Type** **Completed Date**		

Job Safety Analysis

General

JSA ID		**Status**	(1) Intitial
Job Name	Environmental-Other	**Created Date**	11/19/2012
Task Description	Mobilization / Demobilization	**Completed Date**	
Template		**Auto Closed**	

Client / Project

Client	The Sherwin Williams Company
Project Number	EM002616
Project Name	Sherwin Williams Emeryville
PIC	Michael Paczkowski
Project Manager	Lucas Goldstein

User Roles

Role	Employee	Due Date	Completed Date	Supervisor	Active
Developer	Erica Whiting			Lucas Goldstein	☑
HASP Reviewer	Ron Goloubow				☑
Quality Reviewer					☑

Job Steps

Job Step No.	Job Step Description		Potential Hazard	Critical Action	H&S Reference
1	Verify all permits, forms, and trainings have been completed.	1	Administrative function - no hazards anticipated. Action is to ensure health and safety/regulatory compliance	Employees must have the following required training: OSHA 40-Hour HAZWOPER and refresher; First aid/CPR; medical clearance; DOT Hazardous Materials Shipping Training	
2	Mobilization to the Site	1	Collision, injury or death to occupants or other parties; Property damage	1. Secure all equipment in the vehicle prior to driving. 2. Obey all traffic laws and abide by posted speed limits. 3. Be aware of your surroundings and maintain a distance of 4 seconds behind the vehicle ahead. Add distance for adverse weather conditions. 4. Verify that all employees have accurate and understandable directions to the site. Use preprinted map or GPS. 5. Avoid driving when tired. Use cell phones for emergency contact. Do not use cell phones while driving. 6. Complete vehicle inspection checklist.	
		2	Weather Hazards/Road Conditions	Check local and destination forecasts and Road conditions for dates of travel	
3	Loading and unloading materials and equipment	1	Slips, trips, and falls; Lifting hazards and back strain.	Staff should use proper lifting techniques and to request assistance when lifting heavy equipment. Use dolly to transport equipment, if needed.	
		2	Pinch points/lacerations during equipment loading	Identify/avoid pinch points and sharp edges. Wear leather gloves to protect hands/fingers	
		3	Working near vehicles	Be mindful of traffic at all times. Use cones, barricades and signs as appropriate. Wear reflective traffic vests at all times.	
4	Working outdoors	1	Temperature-related illnesses (heat stress); Weather hazards.	Ensure all field staff drinks plenty of fluids; take breaks as needed to avoid overheating, frostbite, etc., dress appropriately for weather conditions. Check local weather forecasts daily, use sunscreen as appropriate, monitor changes in weather, shutdown operations if extreme weather conditions occur; postpone work if lightning is observed or expected.	

		2	Biological hazards (insects and plants)	1. Inspect area for hazardous plants and insects. 2. Apply insect repellent containing DEET during insect season. 3. Check for ticks throughout the day.	
5	Demobilization	1	Slips, trips, and falls; Loss of equipments/supplies from moving vehicle; lifting hazards	Keep all walkways clear of equipment and materials. Follow safe driving procedures (following distances, speed, headlights, safety belts, etc.). Do not use cell phone when driving. Properly secure all equipments and supplies before operating vehicle. Use proper lifting technique.	

PPE — Personal Protective Equipment

Type	Personal Protective Equipment	Description	Required
Dermal Protection	long sleeve shirt/pants		Required
Eye Protection	safety glasses		Required
Foot Protection	Other	Traffic Safety Vest	Required
	steel-toe boots		Required
Hand Protection	work gloves (specify type)		Required

Supplies

Type	Supply	Description	Required
Communication Devices	mobile phone		Required
Miscellaneous	fire extinguisher		Required
	first aid kit		Required
	Other	Traffic cones and flags	Required
Personal	eye wash (specify type)		Required
	insect repellant		Required
	sunscreen		Required

Review Comments

Reviewer		Comments
Employee: **Role** **Review Type** **Completed Date**		
Employee: **Role** **Review Type** **Completed Date**		

Job Safety Analysis

General

JSA ID		**Status**	(1) Intitial
Job Name	Environmental-Other	**Created Date**	11/19/2012
Task Description	Packing coolers with groundwater samples	**Completed Date**	
Template		**Auto Closed**	

Client / Project

Client	The Sherwin Williams Company
Project Number	EM002616
Project Name	Sherwin Williams Emeryville
PIC	Michael Paczkowski
Project Manager	Lucas Goldstein

User Roles

Role	Employee	Due Date	Completed Date	Supervisor	Active
Developer	Erica Whiting			Erica Whiting	☑
HASP Reviewer	Ron Goloubow				☑
Quality Reviewer					☑

Job Steps

Job Step No.	Job Step Description		Potential Hazard	Critical Action	H&S Reference
1	Place samples in cooler for shipment.	1	Contact with broken glass or groundwater if bottles break.	• Place sample containers in bubble wrap or bags provided by laboratory. • Line bottom of cooler with bubble wrap to prevent breakage. • Ensure that sample containers are packed securely in cooler, but do not use excess pressure to force sample containers to fit inside cooler if adequate space is not available. • Wear leather gloves over nitrile gloves to protect hands from glass and/or groundwater if bottles break.	
2	Add ice to sample coolers.	1	Exertion from handling bags of ice.	• Do not lift more than 50 pounds of ice. • Use knees to lift when picking bags of ice off of the ground. • Avoid over-reaching or overextenting your back when placing ice bags into cooler or onto vehicle.	
		2	Contact with ice	• Do not place hands directly on ice bags for extended periods of time. Take breaks as needed to prevent hands from becoming too cold. • Wear leather gloves to provide protection from direct contact with cold ice.	
		3	Slips, trips, fall hazards from packing materials.	• Keep a 10-foot radius clear of packing materials (ice, tape, coolers, etc.). • Keep work area dry - pour excess water/ice onto the ground away from the immediate work area.	
3	Seal cooler with packing tape and custody seal.	1	Contact with cutting devices.	• Use scissors to cut tape. • Wear cut-resistant gloves to protect hands when using cutting devices.	

		2	Exertion/muscle strain from lifting coolers	• Use proper lifting techniques - lift with legs, not back. • Avoid excess twists and turns while moving cooler from one place to another and while placing tape around the cooler. • If cooler weighs more than 50 pounts, use 2-person lift.	
4	Place coolers in vehicle for shipment.	1	• Exertion/muscle strain from lifting coolers.	• Use proper lifting techniques - lift with legs, not back. • Avoid excess twists and turns while moving cooler from one place. • If cooler weighs more than 50 pounts, use 2-person lift.	
		2	Contact with other coolers.	• Avoid getting fingers caught between coolers when moving them. • Wear leather gloves while handling coolers to provide extra hand protection from potential pinch points.	

PPE — Personal Protective Equipment

Type	Personal Protective Equipment	Description	Required
Dermal Protection	long sleeve shirt/pants		Recommended
Eye Protection	safety glasses		Required
Foot Protection	steel-toe boots		Required
Hand Protection	chemical resistant gloves (specify type)	Nitrile	Required
	work gloves (specify type)	Leather or cut-resistant	Required

Supplies

Type	Supply	Description	Required
Communication Devices	mobile phone		Required
Miscellaneous	first aid kit		Required

Review Comments

Reviewer		Comments
Employee: **Role** **Review Type** **Completed Date**		
Employee: **Role** **Review Type** **Completed Date**		
Employee: **Role** **Review Type** **Completed Date**		

Job Safety Analysis

General

JSA ID		**Status**	(1) Intitial
Job Name	Environmental-Groundwater Sampling and	**Created Date**	11/19/2012
Task Description	Water level gauging and groundwater	**Completed Date**	
Template		**Auto Closed**	

Client / Project

Client	The Sherwin Williams Company
Project Number	EM002616
Project Name	Sherwin Williams Emeryville
PIC	Michael Paczkowski
Project Manager	Lucas Goldstein

User Roles

Role	Employee	Due Date	Completed Date	Supervisor	Active
Developer	Erica Whiting			Lucas Goldstein	☑
HASP Reviewer	Ron Goloubow				☑
Quality Reviewer					☑

Job Steps

Job Step No.	Job Step Description		Potential Hazard	Critical Action	H&S Reference
1	Stage at pre-determined sampling location and set up work zone and sampling equipment	1	personnel could be hit by vehicluar traffic.	Set-up cones and establish work area. Position vehicle so that field crew is protected from site traffic. Unload as close to work area as safely possible.	
		2	Sampling equipment, tools and monitoring well covers can cause tripping hazard	Keep equipment picked up and use TRACK to assess and changes	
2	Open wells to equilibrate and gauge wells	1	When squatting down, personnel can be difficult to see by vehicular traffic.	Wear Class II traffic vest if wells are located proximal to vehicular traffic. Use tall cones and the buddy system if practicable.	
		2	Poisionous insects in well vaults i.e. black widdows and walking sticks can bite or spray acid.	Wear elbow length nitrile gloves when opening well vaults where insects are present.Wear proper PPE including safety glasses.	
		3	pinchpoints on well vault can pinch or lacerate fingers.	Use correct tools to open well vault/cap. Wear leather gloves when removing well vault lids, and chemical protective gloves while guaging. Wear proper PPE including safety boots, knee pads and safety glasses.	
		4	Lifting sampling equipment can cause muscle strain	Unload as close to work area as safely possible; use proper lifting and reaching techniques and body positioning; don't carry more than you can handle, and get help moving heavy or awkward objects.	
		5	Pressure can build up inside well causing cap to release under pressure	Keep head away from well cap when removing. If pressure relief valves are on well use prior to opening well	
3	Begin Purging Well and Collecting Parameter Measurements	1	Electrical shock can occur when connecting/disconnecting pump from the battery.	Make sure equipment is turned off when connecting/disconnecting. Wear leather gloves. Use GFCIs when using powered tools and pumps. Do not use in the rain or run electrical cords through wet areas.	
		2	purge water can spill or leak from equipment	Stop purging activities immediately, stop leakage and block any drainage grate with sorbent pads. Call PM to notify them of any reportable spill.	

		3	Water spilling on the ground can cause muddy/slippery conditions	Be careful walking in work area when using plastic around well to protect from spillage	
		4	lacerations can occur when cutting materials such as plastic tubing	When cutting tubing, use tubing cutter. No open fixed blades should ever be used. When possible wear work gloves, leather type.	
		5	purge water can splash into eyes	Pour water slowly into buckets/drums to minimize splashing. Wear safety glasses	
4	Collect GW or Free Product Sample	1	Working with bailer rope can cause rope burns on hands.	Slowly raise and lower the rope or string for the bailer. Wear appropriate gloves for the task.	
		2	sample containers could break or leak preservative	Discard any broken sampleware or glass properly. Do not overtighten sample containers. Wear chemical protective gloves	
5	Recovery of Free Product from well	1	exposure to free product	Additional chemical protection may be necessary based on the type of product. Additionally, safety goggles, a faceshield, or respiratory protection may be required. Verify in the HASP.	
6	Staging of Well Purge water and/or Free Product	1	Muscle strains can occur when moving purge water or drums	If using buckets, do not fill buckets up to the top. Always keep lid on buckets when traveling or moving them to another location. Only half fill buckets so when dumping the buckets weigh less. See drum handling JLA for movement of drums.	Drum handling JLA

PPE — Personal Protective Equipment

Type	Personal Protective Equipment	Description	Required
Eye Protection	safety glasses		Required
Foot Protection	steel-toe boots		Required
Hand Protection	chemical resistant gloves (specify type)	nitrile	Required
	work gloves (specify type)	leather, and elbow or shoulder length	Recommended

Supplies

Type	Supply	Description	Required
Communication Devices	mobile phone		Required
Decontamination	Decon supplies (specify type)	alconox	Required
Miscellaneous	fire extinguisher		Required
	first aid kit		Required
Personal	eye wash (specify type)	bottle	Required
Traffic Control	traffic cones		Required

Review Comments

Reviewer		Comments
Employee: **Role** **Review Type** **Completed Date**		
Employee: **Role** **Review Type** **Completed Date**		

Material Safety Data Sheet Collection
Genium Publishing Corp.
1171 RiverFront Center
Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2000-07

Perchloroethylene
MSDS 313
TET2750

Section 1 - Chemical Product and Company Identification 54.1

Material Name: Perchloroethylene **CAS Number:** 127-18-4
Chemical Formula: C_2Cl_4
Structural Chemical Formula: $Cl_2C=CCl_2$
Synonyms: ANKILOSTIN; ANTISAL 1; ANTISOL 1; CARBON BICHLORIDE; CARBON DICHLORIDE; CZTEROCHLOROETYLEN; DIDAKENE; DILATIN PT; DOW-PER; ENT 1,860; EPA PESTICIDE CHEMICAL CODE 078501; ETHENE,TETRACHLORO-; ETHYLENE TETRACHLORIDE; ETHYLENE,TETRACHLORO-; FEDAL-UN; NEMA; PCE; PER; PERAWIN; PERC; PERCHLOORETHYLEEN,PER; PERCHLOR; PERCHLORAETHYLEN,PER; PERCHLORETHYLENE; PERCHLORETHYLENE,PER; PERCHLOROETHYLENE; PERCLENE; PERCLENE D; PERCLOROETILENE; PERCOSOLV; PERCOSOLVE; PERK; PERKLONE; PERSEC; TETLEN; TETRACAP; TETRACHLOORETHEEN; TETRACHLORAETHEN; TETRACHLORETHYLENE; TETRACHLOROETHENE; 1,1,2,2-TETRACHLOROETHYLENE; TETRACHLOROETHYLENE; TETRACLOROETENE; TETRAGUER; TETRALENO; TETRALEX; TETRAVEC; TETROGUER; TETROPIL
General Use: Used as a drycleaning solvent, a vapor-degreasing solvent; a drying agent for metals and certain other solids. Used also as a heat transfer medium and in the manufacture of fluorocarbons.

Section 2 - Composition / Information on Ingredients

Name	CAS	%
perchloroethylene	127-18-4	100

OSHA PEL
TWA: 100 ppm; STEL: 200 ppm; from Table Z-2. Other Values: 300 mg/m^3; 5 min peak 3hr ppm.

OSHA PEL Vacated 1989 Limits
TWA: 25 ppm; 170 mg/m^3.

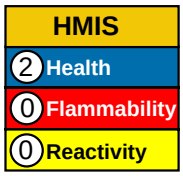
ACGIH TLV
TWA: 25 ppm; 170 mg/m^3; STEL: 100 ppm; 6850 mg/m^3.

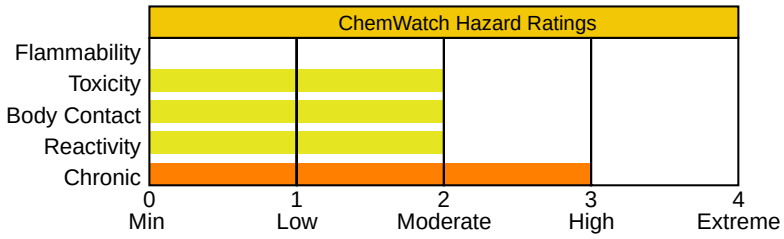
NIOSH REL
No data found.

IDLH Level
150 ppm.

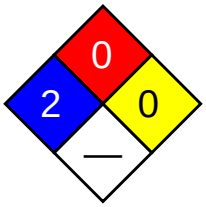
DFG (Germany) MAK
TWA: 50 ppm; 345 mg/m^3.

Section 3 - Hazards Identification









Fire Diamond

ANSI Signal Word
Caution

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Colorless liquid; ether-like odor. Irritating to eyes/skin/respiratory tract. Also causes: headache, dizziness, CNS depression, incoordination, slurred speech. Chronic: liver/kidney damage; possible cancer hazard based on animal studies.

Copyright © 2000 by Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Publishing Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Potential Health Effects

Primary Entry Routes: inhalation, skin contact, eye contact
Target Organs: liver, kidneys, eyes, upper respiratory system, skin, central nervous system (CNS)
Acute Effects

Inhalation: Acute intoxication by halogenated aliphatic hydrocarbons appears to take place over two stages. Signs of a reversible narcosis are evident in the first stage and in the second stage signs of injury to organs may become evident.
A single organ alone is (almost) never involved.
The vapor is highly discomforting to the upper respiratory tract and lungs.
Inhalation hazard is increased at higher temperatures.
Anesthetic and narcotic effects (with dulling of senses and odor fatigue) are a consequence of exposure to chlorinated solvents.
Individual response varies widely; odor may not be considered objectionable at levels which quickly induce central nervous system effects.
High vapor concentrations may give a feeling of euphoria. This may result in reduced responses, followed by rapid onset of unconsciousness, possible respiratory arrest and death.
Accidental high level exposure has produced lightheadedness, unconsciousness and liver and kidney damage in workers. In at least two cases such exposures were fatal. Subjects exposed to 106 ppm in laboratory studies experienced slight eye irritation; dizziness and sleepiness were reported at 216 ppm; at exposures of 280 ppm or 600 ppm for 10 minutes there was a loss of motor coordination. In another study subjects exposed for 7 hours at 101 ppm complained of eye irritation and subjective symptoms such headache, drowsiness and sleepiness.

Eye: The liquid may produce eye discomfort and is capable of causing temporary impairment of vision and/or transient eye inflammation, ulceration Eye contact may cause lachrymation (tears) and burning sensation.
The vapor is highly discomforting to the eyes.
The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

Skin: The liquid is highly discomforting to the skin if exposure is prolonged and may cause drying of the skin, which may lead to dermatitis.
Toxic effects may result from skin absorption.
Absorption by skin may readily exceed vapor inhalation exposure.
Symptoms for skin absorption are the same as for inhalation.
Bare unprotected skin should not be exposed to this material.
The material may accentuate any pre-existing skin condition.
The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis (nonallergic).
This form of dermatitis is often characterized by skin redness (erythema) and swelling (edema) which may progress to vesiculation, scaling and thickening of the epidermis.
Histologically there may be intercellular edema of the spongy layer (spongiosis) and intracellular edema of the epidermis.
Prolonged contact is unlikely, given the severity of response, but repeated exposures may produce severe ulceration.
Industrial experience shows localized skin irritation. Prolonged dermal contact can cause chemical burns and blistering.

Ingestion: Considered an unlikely route of entry in commercial/industrial environments.
The liquid is highly discomforting and toxic if swallowed and may be fatal if swallowed in large quantity.
Ingestion may result in nausea, abdominal irritation, pain and vomiting.
When used in the treatment of hookworm (4.5 to 6.5 gm orally) the only adverse effect is inebriation. Transient hepatotoxicity in patients given single oral doses of up to 5 mL have been recorded.

Carcinogenicity: NTP - Class 2B, Reasonably anticipated to be a carcinogen, sufficient evidence of carcinogenicity from studies in experimental animals; IARC - Group 2B, Possibly carcinogenic to humans; OSHA - Not listed; NIOSH - Listed as carcinogen; ACGIH - Class A3, Animal carcinogen; EPA - Not listed; MAK - Class B, Justifiably suspected of having carcinogenic potential.

Chronic Effects: Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following.
Workers inhaling 232 to 385 ppm for 8 hours/day, 5 days/week for 2 to 6 years have shown abnormal hepatic function, including cirrhosis, with lightheadedness, headache, malaise and dizziness.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air.
Lay patient down. Keep warm and rested.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor.

Eye Contact: Immediately hold the eyes open and flush continuously for at least 15 minutes with fresh running water.
Ensure irrigation under eyelids by occasionally lifting the upper and lower lids.
Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Copyright © 2000 Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited.

Skin Contact: Immediately remove all contaminated clothing, including footwear (after rinsing with water).
Wash affected areas thoroughly with water (and soap if available).
Seek medical attention in event of irritation.
Ingestion: Contact a Poison Control Center.
Do NOT induce vomiting. Give a glass of water.
Avoid giving milk or oils.
Avoid giving alcohol.
After first aid, get appropriate in-plant, paramedic, or community medical support.
Note to Physicians: Treat symptomatically.
Do not administer sympathomimetic drugs as they may cause ventricular arrhythmias.
For acute or short-term repeated exposures to perchloroethylene:
Tetrachloroethylene/perchlorethylene is well absorbed through the lungs with peak levels more important than duration in determining blood concentration.
Lungs excrete most of the absorbed tetrachloroethylene in an unchanged state; about 3% is converted by the liver to form trichloracetic acid and subsequently excreted by the kidney. Exhaled material has a biological half-life of 65 hours.
INHALATION:
The treatment of acute inhalation exposures is supportive with initial attention directed to evaluation/support of ventilation and circulation.
As with all hydrocarbons care must be taken to reduce the risk of aspiration by proper positioning and medical observation.
INGESTION:
1.The ingestion level at which emesis should be induced is difficult to predict in the absence of extensive human studies.
2.The role of charcoal and cathartics remains uncertain.

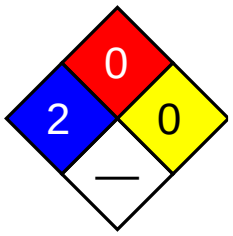
BIOLOGICAL EXPOSURE INDEX - BEI
These represent the determinants observed in specimens collected from a healthy worker who has been exposed at the Exposure Standard (ES or TLV):

Determinant	Index	Sampling Time	Comments
Perchloroethylene in end-exhaled air	10 ppm	Prior to last shift of work-week	
Perchloroethylene in Blood	1 mg/L	Prior to last shift of work-week	
Trichloroacetic acid in urine	7 mg/L	End of work-week	NS,SQ

NS: Non-specific determinant; also seen after exposure to other materials
SQ: Semi-quantitative determinant - Interpretation may be ambiguous; should be used as a screening test or confirmatory test.

Section 5 - Fire-Fighting Measures

Flash Point: Nonflammable
Autoignition Temperature: 490 °C
LEL: 1.8% v/v
UEL: 11.5% v/v at 740 mm Hg 160 °C
Extinguishing Media: Use extinguishing media suitable for surrounding area.
General Fire Hazards/Hazardous Combustion Products: Nonflammable liquid. However vapor will burn when in contact with high temperature flame. Ignition ceases on removal of flame.
May form a flammable/explosive mixture in an oxygen enriched atmosphere. Heating may cause expansion/vaporization with violent rupture of containers. Decomposes on heating and produces corrosive fumes of hydrochloric acid, carbon monoxide and small amounts of toxic phosgene.



Fire Diamond

Fire Incompatibility: Avoid mixing with strong alkalis or powdered metals, particularly zinc as ignition may result.
Fire-Fighting Instructions: Contact fire department and tell them location and nature of hazard.
Wear breathing apparatus plus protective gloves for fire only. Prevent, by any means available, spillage from entering drains or waterways.
Use fire fighting procedures suitable for surrounding area.
Do not approach containers suspected to be hot.

Copyright © 2000 Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited.

Cool fire-exposed containers with water spray from a protected location.
If safe to do so, remove containers from path of fire.
Equipment should be thoroughly decontaminated after use.

Section 6 - Accidental Release Measures

Small Spills: Clean up all spills immediately.
Wear protective neoprene gloves and chemical goggles.
If risk of overexposure exists, wear NIOSH-approved respirator.
Wipe up and absorb small quantities with vermiculite or other absorbent material.
DO NOT discharge into sewer or waterways.
Place spilled material in clean, dry, sealable, labeled container.
Large Spills: Minor hazard. Clear area of personnel and move upwind.
Contact fire department and tell them location and nature of hazard.
Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways.
No smoking, bare lights or ignition sources. Increase ventilation.
Stop leak if safe to do so. Contain spill with sand, earth or vermiculite.
Collect recoverable product into labeled containers for recycling.
Absorb remaining product with sand, earth or vermiculite.
Collect solid residues and seal in labeled drums for disposal.
Wash area and prevent runoff into drains.
If contamination of drains or waterways occurs, advise emergency services.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Avoid generating and breathing mist. Avoid all personal contact, including inhalation.
Wear protective clothing when risk of exposure occurs.
Use in a well-ventilated area. Prevent concentration in hollows and sumps.
DO NOT enter confined spaces until atmosphere has been checked.
DO NOT allow material to contact humans, exposed food or food utensils.
Avoid contact with incompatible materials.
When handling, DO NOT eat, drink or smoke.
Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately.
Launder contaminated clothing before reuse.
Use good occupational work practices. Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
Recommended Storage Methods: Check that containers are clearly labeled. Glass container.
Heavy gauge metal packages/heavy gauge metal drums.
Avoid storage with zinc, galvanized or diecast metal (including bungs).
DO NOT use aluminum or galvanized containers.
Packaging as recommended by manufacturer.
Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build-up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear. Use in a well-ventilated area.
Local exhaust ventilation may be required for safe working, i.e., to keep exposures below required standards; otherwise, PPE is required.
If inhalation risk exists, wear NIOSH-approved organic-vapor respirator or air supplied breathing apparatus.
Personal Protective Clothing/Equipment
Eyes: Chemical goggles. Full face shield.
Hands/Feet: Neoprene gloves; Viton gloves.
PVA gloves.
PVC gloves.
Protective footwear.
Respiratory Protection:
Exposure Range >100 to <150 ppm: Supplied Air, Constant Flow/Pressure Demand, Half Mask
Exposure Range 150 to unlimited ppm: Self-contained Breathing Apparatus, Pressure Demand, Full Face
Note: poor warning properties
Other: Overalls. Eyewash unit. Ensure there is ready access to an emergency shower.

Copyright © 2000 Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited.

Glove Selection Index:

PE/EVAL/PE	A
VITON/CHLOROBUTYL	A
VITON/NITRILE	A
VITON	A
PVA	A
CPE	A
NITRILE	B
TEFLON	B
NITRILE+PVC	C
SARANEX-23 2-PLY	C
SARANEX-23	C
PVC	C
BUTYL	C
NEOPRENE	C

A: Best selection
B: Satisfactory; may degrade after 4 hours continuous immersion
C: Poor to dangerous choice for other than short-term immersion

Section 9 - Physical and Chemical Properties

Appearance/General Info: Colorless liquid, with a chloroform-like odor. Extremely stable, resists hydrolysis. Miscible with alcohol, ether and oils.

Physical State: Liquid
Vapor Pressure (kPa): 2.11 at 22 °C
Vapor Density (Air=1): 5.83
Formula Weight: 165.82
Specific Gravity (H_2O=1, at 4 °C): 1.63 at 15 °C
Water Solubility: 0.02% by weight
Evaporation Rate: 0.09 Ether=1

pH: Not applicable
pH (1% Solution): Not applicable.
Boiling Point Range: 121 °C (250 °F) at 760 mm Hg
Freezing/Melting Point Range: -19 °C (-2.2 °F)
Volatile Component (% Vol): 100

Section 10 - Stability and Reactivity

Stability/Polymerization: Product is considered stable and hazardous polymerization will not occur.
Storage Incompatibilities: Avoid reaction with oxidizing agents. Segregate from strong alkalis.
Haloalkenes are highly reactive. Some of the more lightly substituted lower members are highly flammable; many members of the group are peroxidizable and polymerizable.
The presenceof 0.5% trichloroethylene as an impurity caused generation of dichloroacetylene during unheated drying over solid sodium hydroxide.
Subsequent fractional distillation produced an explosion.

Section 11 - Toxicological Information

Unless otherwise specified data extracted from RTECS - Registry of Toxic Effects of Chemical Substances

TOXICITY
Oral (rat) LD_{50}: 2629 mg/kg
Inhalation (man) LD_{Lo}: 2857 mg/kg
Inhalation (human) TC_{Lo}: 96 ppm/7 hrs
Inhalation (man) TC_{Lo}: 280 ppm/2 hrs
Inhalation (man) TC_{Lo}: 600 ppm/10 min
Inhalation (rat) LC_{Lo}: 34200 mg/m^3/8 hr

IRRITATION
Skin (rabbit): 810 mg/24h -SEVERE
Eye (rabbit): 162 mg -mild

See NIOSH, *RTECS* KX 3850000, for additional data.

Section 12 - Ecological Information

Environmental Fate: If it is released to soil, it will be subject to evaporation into the atmosphere and to leaching to the groundwater. Biodegradation may be an important process in anaerobic soils based on laboratory tests with methanogenic columns. Slow biodegradation may occur in groundwater where acclimated populations of microorganisms exist. If released to water, it will be subject to rapid volatilization with estimated half-lives ranging from <1 day to several weeks. It will not be expected to significantly biodegrade, bioconcentrate in aquatic organisms or significantly adsorb to sediment. It will not be expected to significantly hydrolyze in soil or water under normal environmental conditions. If released to the atmosphere, it will exist mainly in the gas-phase and it will be subject to photooxidation with estimates of degradation time scales ranging from an approximate half-life of 2 months to complete degradation in an hour. Some in the atmosphere may be subject to washout in rain based on the solubility in water.

Copyright © 2000 Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited.

Ecotoxicity: LC_{50} Tanytarsus dissimilis (midge) 30, 840 ug/l/48 hr, static bioassay; LC_{50} Poecilia reticulata (guppy) 18 ppm/7 days /Conditions of bioassay not specified; LC_{50} Daphnia magna (water flea) 18 mg/l/48 hr, static bioassay, at 22 °C; LC_{50} Salmo gairdneri (rainbow trout) 5 mg/l/96 hr, static bioassay at 12 °C
Henry's Law Constant: 2.87 $x10^{-2}$
BCF: fathead minnow 38.9
Biochemical Oxygen Demand (BOD): none
Octanol/Water Partition Coefficient: log K_{ow} = 3.40
Soil Sorption Partition Coefficient: K_{oc} = 209

Section 13 - Disposal Considerations

Disposal: Reclaim solvent at an approved site.
Allow absorbed spillage to evaporate in an open top container, away from habitation.
Incinerate residue at an approved site.
Used containers should be left upside down with bungs out.
Return containers to drum reconditioner or recycler.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: TETRACHLOROETHYLENE
Additional Shipping Information: PERCHLOROETHYLENE
Hazard Class: 6.1(b)
ID No.: 1897
Packing Group: III
Label: Harmful[6]

Section 15 - Regulatory Information

EPA Regulations:
RCRA 40 CFR: Listed U210 Toxic Waste
CERCLA 40 CFR 302.4: Listed per RCRA Section 3001; per CWA Section 307(a) 100 lb (45.35 kg)
SARA 40 CFR 372.65: Listed
SARA EHS 40 CFR 355: Not listed
TSCA: Listed

Section 16 - Other Information

Research Date: .....1999-11 **Review Date:** 2000-07

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Publishing Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2000 Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium Publishing Corp.
1171 RiverFront Center
Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2000-07

Trichloroethylene
MSDS 312
TRI2710

Section 1 - Chemical Product and Company Identification 54.1

Material Name: Trichloroethylene **CAS Number:** 79-01-6
Chemical Formula: C_2HCl_3
Structural Chemical Formula: $ClCH=CCl_2$
Synonyms: ACETYLENE TRICHLORIDE; ALGYLEN; ANAMENTH; BENZINOL; BLACOSOLV; BLANCOSOLV; CECOLENE; CHLORILEN; 1-CHLORO-2,2-DICHLOROETHYLENE; CHLORYLEA; CHLORYLEA,CHORYLEN,CIRCOSOLV,CRAWHASPOL,DOW-TRI,DUKERON,PER-A-CLOR,TRIAD,TRIAL,TRI-PLUS M,VITRAN; CHLORYLEN; CHORYLEN; CIRCOSOLV; CRAWHASPOL; DENSINFLUAT; 1,1-DICHLORO-2-CHLOROETHYLENE; DOW-TRI; DUKERON; EPA PESTICIDE CHEMICAL CODE 081202; ETHENE,TRICHLORO-; ETHINYL TRICHLORIDE; ETHYLENE TRICHLORIDE; ETHYLENE,TRICHLORO-; FLECK-FLIP; FLOCK FLIP; FLUATE; GEMALGENE; GERMALGENE; LANADIN; LETHURIN; NARCOGEN; NARKOGEN; NARKOSOID; NIALK; NSC 389; PERM-A-CHLOR; PERM-A-CLOR; PETZINOL; PHILEX; TCE; THRETHYLEN; THRETHYLENE; TRETHYLENE; TRI; TRIAD; TRIAL; TRIASOL; TRICHLOORETHEEN; TRICHLOORETHYLEEN,TRI; TRICHLORAETHEN; TRICHLORAETHYLEN,TRI; TRICHLORAN; TRICHLOREN; TRICHLORETHENE; TRICHLORETHYLENE; TRICHLORETHYLENE,TRI; TRICHLOROETHENE; 1,1,2-TRICHLOROETHYLENE; TRICHLOROETHYLENE; TRICHLOROETHYLENE; 1,2,2-TRICHLOROETHYLENE; TRI-CLENE; TRICLENE; TRICLORETENE; TRICLOROETILENE; TRIELENE; TRIELIN; TRIELINA; TRIELINE; TRIKLONE; TRILEN; TRILENE; TRILINE; TRIMAR; TRIOL; TRI-PLUS; TRI-PLUS M; VESTROL; VITRAN; WESTROSOL
General Use: Mainly used for vapor degreasing; solvent in textile and electronics industries; for adhesives, lubricants and consumer products (such as spot removers and rug cleaners).
Until recently, it was used to make hop extracts for beer, decaffeinated coffee and spice extracts.

Section 2 - Composition / Information on Ingredients

Name	CAS	%
trichloroethylene	79-01-6	> 99

OSHA PEL
TWA: 100 ppm; STEL: 200 ppm; from Table Z-2. Other Values: 300 mg/m^3; 5 min peak 2hr ppm.

OSHA PEL Vacated 1989 Limits
TWA: 50 ppm; 270 mg/m^3; STEL: 200 ppm; 1080 mg/m^3.

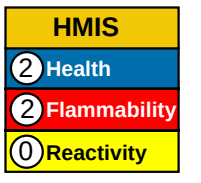
ACGIH TLV
TWA: 50 ppm; 269 mg/m^3; STEL: 100 ppm; 5370 mg/m^3.

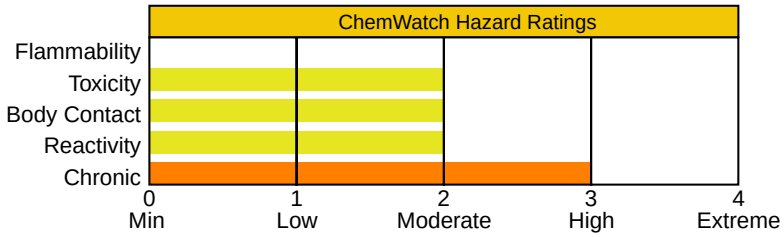
NIOSH REL
No data found.

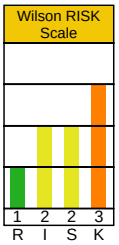
IDLH Level
1000 ppm.

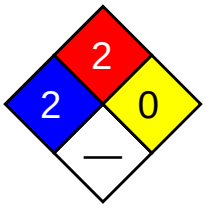
DFG (Germany) MAK
TWA: 50 ppm; 270 mg/m^3.

Section 3 - Hazards Identification









Fire Diamond

ANSI Signal Word
Warning!


Flammable

Copyright © 2000 by Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Publishing Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Clear, colorless liquid; sweet odor. Irritating to eyes/skin/respiratory tract. Inhalation: irregular heart beat, drunkenness. Chronic: heart, liver and kidney damage, dermatitis. Birth defects and cancer may occur based on animal studies. Flammable.

Potential Health Effects

Primary Entry Routes: inhalation, skin contact, eye contact, ingestion (rarely)

Target Organs: respiratory system, central nervous system (CNS), peripheral nervous system, cardiovascular system, liver, kidneys, skin

Acute Effects

Inhalation: The vapor is mildly discomforting to the upper respiratory tract.
Inhalation hazard is increased at higher temperatures.
Anesthetics and narcotic effects (with dulling of senses and odor fatigue) are a consequence of exposure to chlorinated solvents.
Individual response varies widely; odor may not be considered objectionable at levels which quickly induce central nervous system effects.
High vapor concentrations may give a feeling of euphoria. This may result in reduced responses, followed by rapid onset of unconsciousness, possible respiratory arrest and death.
Acute effects from inhalation of high concentrations of vapor are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterized by headache and dizziness, increased reaction time, fatigue and loss of coordination.
If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.
Evidence of acute human toxicity comes mainly from the use of TCE as an anesthetic, Tachypnea and ventricular arrhythmias are experienced at inhaled concentrations exceeding 15000 ppm. Systemic toxicity is low following anesthesia. Occasional hepatotoxicity (liver dysfunction) has been reported; this is probably due to the breakdown of TCE to dichloroacetylene and phosgene by soda-lime present in some anesthetic devices. The effects of TCE appear to be enhanced in some individuals by simultaneous exposure to caffeine, ethanol and other drugs. "Degreasers Flush" describes a reddening of facial, neck, and back skin and is seen after intake of substantial quantities of ethanol by certain individuals after exposures to TCE.

Eye: The liquid is highly discomforting to the eyes and is capable of causing pain and severe conjunctivitis.
Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.
The vapor is discomforting to the eyes.
The material may produce moderate eye irritation leading to inflammation.
Repeated or prolonged exposure to irritants may produce conjunctivitis.

Skin: The liquid is discomforting to the skin and may cause drying of the skin, which may lead to dermatitis.
Toxic effects may result from skin absorption.
Bare unprotected skin should not be exposed to this material. The material may accentuate any pre-existing skin condition.
The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis (nonallergic).
This form of dermatitis is often characterized by skin redness (erythema) and swelling (edema) which may progress to vesiculation, scaling and thickening of the epidermis.
Histologically there may be intercellular edema of the spongy layer (spongiosis) and intracellular edema of the epidermis.
Repeated exposures may produce severe ulceration.
Localized application may produce pustular eruptions, pruritus and erythema. A permeability coefficient of 1.6×10^{-2} cm/hr has been calculated by the US EPA. Percutaneous absorption is unlikely to contribute significantly to total body burdens unless dermatitis is present.

Ingestion: The liquid is highly discomforting and toxic if swallowed.
Ingestion may result in nausea, abdominal irritation, pain and vomiting.
Considered an unlikely route of entry in commercial/industrial environments.

Carcinogenicity: NTP - Not listed; IARC - Group 3, Not classifiable as to carcinogenicity to humans; OSHA - Not listed; NIOSH - Listed as carcinogen; ACGIH - Class A5, Not suspected as a human carcinogen; EPA - Not listed; MAK - Class B, Justifiably suspected of having carcinogenic potential.

Chronic Effects: Sensitive humans may experience anesthetic effects from short exposures.
Chronic effects of exposure include fatigue, headache, irritability, vomiting, skin flush and intolerance to alcohol.
Liver, kidney, heart and neurological damage may also result from chronic overexposure.
Alcohol intake may increase the toxic effects of the material.
A variety of disturbances have been seen among workers exposed at concentrations ranging from 1 to 335 ppm. These disturbances increased with the length of exposure (to 5 years or more) and where more prominent when exposures exceeded 40 ppm. Increased complaints of alcohol intolerance, tremors, giddiness and anxiety were amongst symptoms recorded. Variation in effects in different occupational settings may be due to different physical workloads.

Copyright © 2000 Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited.

There appeared to be no increase in the expected rates of congenital defects in children born to women exposed to TCE over a 13 year period.
Epidemiological studies consistently fail to show a link between cancers and TCE exposure. This is significant because of the tens of thousands of exposed workers monitored.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air.
Lay patient down. Keep warm and rested.
If available, administer medical oxygen by trained personnel.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor, without delay.
Eye Contact: Immediately hold the eyes open and flush continuously for at least 15 minutes with fresh running water.
Ensure irrigation under eyelids by occasionally lifting the upper and lower lids.
Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact: Immediately remove all contaminated clothing, including footwear (after rinsing with water).
Wash affected areas thoroughly with water (and soap if available).
Seek medical attention in event of irritation.
Ingestion: Contact a Poison Control Center.
Do NOT induce vomiting. Give a glass of water.
Avoid giving milk or oils.
Avoid giving alcohol.
After first aid, get appropriate in-plant, paramedic, or community medical support.
Note to Physicians: Treat symptomatically.
Do not administer sympathomimetic drugs as they may cause ventricular arrhythmias.
Following acute or short-term continued exposures to trichloroethylene:
1.Trichloroethylene concentration in expired air correlates with exposure. 8 hours exposure to 100 ppm produces levels of 25 ppm immediately and 1 ppm 16 hours after exposures.
2.Most mild exposure respond to removal from the source and supportive care.
Serious toxicity most often results from hypoxemia or cardiac dysrhythmias so that oxygen, intubation, intravenous lines and cardiac monitoring should be started initially as the clinical situation dictates.
3.Ipecac syrup should be give to alert patients who ingest more than a minor amount and present within 2 hours.
4.The efficacy of activated charcoal and cathartics is unclear.
5.The metabolites, trichloracetic acid, trichlorethanol and to a lesser degree, chloral hydrate, may be detected in the urine up to 16 days postexposure.

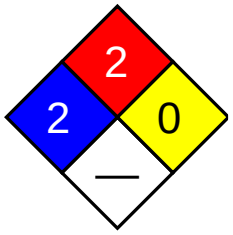
BIOLOGICAL EXPOSURE INDEX - BEI
These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant	Index	Sampling Time	Comments
Trichloroacetic acid in urine	10 mg/gm creatinine	End of work-week	NS
Trichloroacetic acid AND Trichloroethanol in urine	300 mg/mg creatinine	End of shift at end of work-week	NS
Free Trichloroethanol in blood	4 mg/L	End of shift at end of work-week	NS
Trichloroethylene in end-exhaled air			SQ
Trichloroethylene in blood			SQ

NS: Non-specific determinant; also seen after exposure to other materials
SQ: Semi-quantitative determinant - Interpretation may be ambiguous; should be used as a screening test or confirmatory test.

Copyright © 2000 Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 5 - Fire-Fighting Measures



Fire Diamond

Flash Point: 32.222 °C Closed Cup
Autoignition Temperature: 420 °C
LEL: 8% v/v
UEL: 10.5% v/v
Extinguishing Media: Water spray or fog; foam, dry chemical powder, or BCF (where regulations permit).
Carbon dioxide.
General Fire Hazards/Hazardous Combustion Products: Vapor will burn when in contact with high temperature flame.
May form a flammable/explosive mixture in an oxygen enriched atmosphere. Heating may cause expansion/vaporization with violent rupture of containers. Decomposes on heating and produces corrosive fumes of hydrochloric acid, carbon monoxide and small amounts of toxic phosgene.
Fire Incompatibility: Avoid reaction with strong oxidizing agents (particularly oxygen in gas or liquid form and nitrogen dioxide), strong bases, sodium and sodium-potassium alloys. Powdered metals; magnesium, zinc and aluminum.
Contact with water may result in the slow formation of hydrochloric acid.
Attacks natural rubber.
Fire-Fighting Instructions: Contact fire department and tell them location and nature of hazard.
Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways.
Use water delivered as a fine spray to control fire and cool adjacent area.
Avoid spraying water onto liquid pools.
Do not approach containers suspected to be hot.
Cool fire-exposed containers with water spray from a protected location.
If safe to do so, remove containers from path of fire.

Section 6 - Accidental Release Measures

Small Spills: Remove all ignition sources. Clean up all spills immediately.
Avoid breathing vapors and contact with skin and eyes.
Control personal contact by using protective equipment.
Contain and absorb spill with sand, earth, inert material or vermiculite.
Wipe up. Place in a suitable labeled container for waste disposal.
Large Spills: Clear area of personnel and move upwind.
Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways.
Increase ventilation.
No smoking or bare lights within area.
Stop leak if safe to do so.
Contain and absorb spill with sand, earth, inert material or vermiculite.
Collect and seal in labeled drums for disposal.
If contamination of drains or waterways occurs, advise emergency services.
After clean-up operations, decontaminate and launder all protective clothing and equipment before storing and reusing.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Avoid all personal contact, including inhalation.
Wear protective clothing when risk of overexposure occurs.
Use in a well-ventilated area. Prevent concentration in hollows and sumps.
DO NOT enter confined spaces until atmosphere has been checked.
DO NOT allow material to contact humans, exposed food or food utensils.
Avoid smoking, bare lights or ignition sources. When handling, DO NOT eat, drink or smoke. Avoid contact with incompatible materials.
Keep containers securely sealed when not in used. Avoid physical damage to containers. Always wash hands with soap and water after handling. Working clothes should be laundered separately.
Launder contaminated clothing before reuse.
Observe manufacturer's storing/handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
Recommended Storage Methods: Inhibited grades may be stored in metal drums.
DO NOT use aluminum or galvanized containers. Check that containers are clearly labeled and free from leaks.
Packaging as recommended by manufacturer.

Copyright © 2000 Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited.

Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Local exhaust ventilation usually required.
If risk of overexposure exists, wear NIOSH-approved respirator.
Correct fit is essential to obtain adequate protection. NIOSH-approved self contained breathing apparatus (SCBA) may be required in some situations.
Provide adequate ventilation in warehouse or closed storage area.

Personal Protective Clothing/Equipment

Eyes: Safety glasses with side shields; chemical goggles. Full face shield.
Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Hands/Feet: PVA gloves. Polyethylene gloves.
Viton gloves.
PVC boots.

Respiratory Protection:
Exposure Range >100 to <1000 ppm: Supplied Air, Constant Flow/Pressure Demand, Half Mask
Exposure Range 1000 to unlimited ppm: Self-contained Breathing Apparatus, Pressure Demand, Full Face
Note: odor threshold unknown

Other: Overalls. Eyewash unit. Barrier cream. Skin cleansing cream.

Glove Selection Index:

PE/EVAL/PE	A
PVA	A
TEFLON	A
VITON	B
VITON/NEOPRENE	C
VITON/NITRILE	C
HYPALON	C
NEOPRENE	C
PVC	C
NITRILE	C

A: Best selection
B: Satisfactory; may degrade after 4 hours continuous immersion
C: Poor to dangerous choice for other than short-term immersion

Section 9 - Physical and Chemical Properties

Appearance/General Info: Colorless liquid with a sweetish, chloroform-like odor, miscible with most organic solvents.

Physical State: Liquid
Vapor Pressure (kPa): 7.87 at 20 °C
Vapor Density (Air=1): 4.54
Formula Weight: 131.38
Specific Gravity (H_2O=1, at 4 °C): 1.47 at 15 °C
Water Solubility: < 1 mg/mL at 21 °C
pH: Not applicable
pH (1% Solution): Not applicable.
Boiling Point Range: 87 °C (189 °F)
Freezing/Melting Point Range: -73 °C (-99.4 °F)
Volatile Component (% Vol): 100

Section 10 - Stability and Reactivity

Stability/Polymerization: Decomposes in the presence of moisture to produce corrosive acid.
Product is considered stable under normal handling conditions. Hazardous polymerization will not occur.

Storage Incompatibilities: Avoid storage with strong oxidizers (particularly oxygen in gas or liquid form and nitrogen dioxide), strong bases, acetone, sodium/sodium-potassium alloys, magnesium, zinc and aluminum.
Avoid contact with water as the slow formation of hydrochloric acid results.
Attacks natural rubber.
Haloalkenes are highly reactive. Some of the more lightly substituted lower members are highly flammable; many members of the group are peroxidizable and polymerizable.

Copyright © 2000 Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 11 - Toxicological Information

Unless otherwise specified data extracted from RTECS - Registry of Toxic Effects of Chemical Substances

TOXICITY
Oral (human) LD_{Lo}: 7000 mg/kg
Oral (man) TD_{Lo}: 2143 mg/kg
Oral (rat) LD_{50}: 5650 mg/kg
Inhalation (man) LC_{Lo}: 2900 ppm
Inhalation (human) TD_{Lo}: 812 mg/kg
Inhalation (human) TC_{Lo}: 6900 mg/m^3/10 m
Inhalation (man) TC_{Lo}: 2900 ppm
Inhalation (man) TC_{Lo}: 110 ppm/8h
Inhalation (man) TC_{Lo}: 160 ppm/83 m

IRRITATION
Skin (rabbit): 500 mg/24h - SEVERE
Eye (rabbit): 20 mg/24h - SEVERE

See NIOSH, *RTECS* KX 4550000, for additional data.

Section 12 - Ecological Information

Environmental Fate: No data found.

Ecotoxicity: LC_{50} Sheepshead minnow 20 mg/l/96 hr. /Conditions of bioassay not specified; LC_{50} Mexican axolotl (3-4 wk after hatching) 48 mg/l/48 hr /Conditions of bioassay not specified; LC_{50} Clawed toad (3-4 wk after hatching) 45 mg/l/48 hr /Conditions of bioassay not specified; LC_{50} Pimephales promelas (fathead minnow) 40.7 mg/l/96 hr (95% confidence limits 31.4-71.8 mg/l) /Flow-through test; EC_{10} Pimephales promelas (fathead minnow) 15.2 mg/l/24 hr; 16.9 mg/l/48 hr; 15.5 mg/l/72 hr; 13.7 mg/l/96 hr; Toxic effect for all concentrations specified: loss of equilibrium. /Flow-through bioassay; Toxicity Threshold (Cell Multiplication Inhibition Test) Scenedesmus quadricauda(green algae) >1000 mg/l /Time not specified, conditions of bioassay not specified; Toxicity Threshold (Cell Multiplication Inhibition Test) Pseudomonas putida (bacteria) 65 mg/l ; LC_{50} Grass shrimp 2 mg/l/96 hr. /Conditions of bioassay not specified

Henry's Law Constant: 1 x10^{-2}

BCF: bluegill 17 to 39

Biochemical Oxygen Demand (BOD): 0%, 20 days

Octanol/Water Partition Coefficient: log K_{ow} = 2.29

Soil Sorption Partition Coefficient: K_{oc} = 2.0

Section 13 - Disposal Considerations

Disposal: Recycle wherever possible. Consult manufacturer for recycling options.
Follow applicable federal, state, and local regulations.
Reclaim solvent at an approved site.
Evaporate or incinerate residue at an approved site.
Recycle containers if possible, or dispose of in an authorized landfill.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: TRICHLOROETHYLENE **Additional Shipping Information:**
Hazard Class: 6.1(b)
ID No.: 1710
Packing Group: III
Label: Harmful[6]

Section 15 - Regulatory Information

EPA Regulations:

RCRA 40 CFR: Listed U228 Toxic Waste
CERCLA 40 CFR 302.4: Listed per CWA Section 311(b)(4); per RCRA Section 3001; per CWA Section 307(a) 100 lb (45.35 kg)
SARA 40 CFR 372.65: Listed
SARA EHS 40 CFR 355: Not listed
TSCA: Listed

Section 16 - Other Information

Research Date: .....1999-11 **Review Date:** 2000-07

Copyright © 2000 Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited.

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Publishing Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2000 Genium Publishing Corporation. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2006-06

Section 1 - Chemical Product and Company Identification 61

Material Name: Toluene
CAS Number: 108-88-3
Chemical Formula: C_7H_8
Structural Chemical Formula: $C_6H_5CH_3$
EINECS Number: 203-625-9
ACX Number: X1001512-0
Synonyms: ANTISAL 1A; BENZENE,METHYL-; CP 25; METHACIDE; METHANE,PHENYL-; METHYL BENZENE; METHYL BENZOL; METHYLBENZENE; METHYLBENZOL; PHENYL METHANE; PHENYLMETHANE; TOLUEEN; TOLUEN; TOLUENE; TOLUENO; TOLUOL; TOLUOLO; TOLU-SOL
General Use: Used as a solvent for paint, resins, lacquers inks & adhesives. Component of solvent blends and thinners; in gasoline and aviation fuel. Used in the manufacture of chemicals, dyes, explosives, benzoic acid.
Some grades of toluene may contain traces of xylene and benzene.
Odor threshold: 2 ppm approx. Odor is not a reliable warning property due to olfactory fatigue.

Section 2 - Composition / Information on Ingredients

Name	CAS	%
toluene	108-88-3	> 99.5

OSHA PEL
TWA: 200 ppm; Ceiling: 300 ppm; 500 ppm, 10-minute maximum peak.

ACGIH TLV
TWA: 50 ppm; skin.

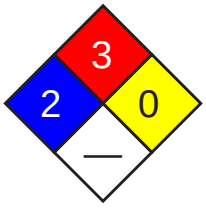
EU OEL
TWA: 192 mg/m^3 (50 ppm); STEL: 384 mg/m^3 (100 ppm).

NIOSH REL
TWA: 100 ppm (375 mg/m^3); STEL: 150 ppm (560 mg/m^3).

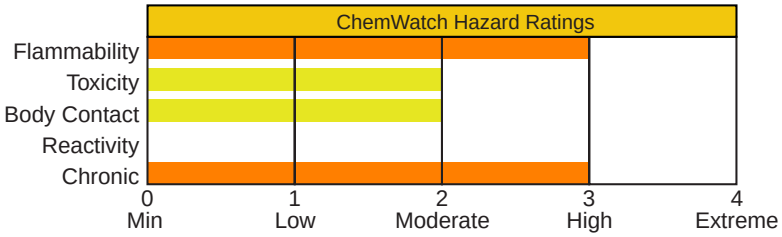
IDLH Level
500 ppm.

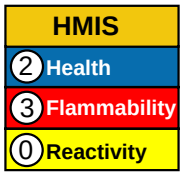
DFG (Germany) MAK
TWA: 50 ppm; PEAK: 200 ppm; skin.

Section 3 - Hazards Identification



Fire Diamond





ANSI Signal Word

Danger!


Flammable

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Colorless liquid; sickly, sweet odor. Irritating to eyes/skin/respiratory tract. Other Acute Effects: weakness, headache, dizziness, confusion, insomnia. Chronic Effects: liver/kidney damage, may cause birth defects. Flammable.

Potential Health Effects

Target Organs: Skin, liver, kidneys, central nervous system.
Primary Entry Routes: Inhalation, skin contact/absorbtion.
Acute Effects
Inhalation: The vapor is highly discomforting to the upper respiratory tract. Inhalation hazard is increased at higher temperatures.

Copyright © 2006 by Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Acute effects from inhalation of high concentrations of vapor are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterized by headache and dizziness, increased reaction time, fatigue and loss of coordination.
If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.
Central nervous system (CNS) depression may include nonspecific discomfort, symptoms of giddiness, headache, dizziness, nausea, anesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness.
Serious poisonings may result in respiratory depression and may be fatal.

Eye: The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis.
Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.
The vapor is discomforting to the eyes if exposure is prolonged.
The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

Skin: The liquid may produce skin discomfort following prolonged contact.
Defatting and/or drying of the skin may lead to dermatitis and it is absorbed by skin.
Toxic effects may result from skin absorption.
Open cuts, abraded or irritated skin should not be exposed to this material.
The material may accentuate any pre-existing skin condition.
The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterized by skin redness (erythema) and swelling (edema) which may progress to vesiculation, scaling and thickening of the epidermis. Histologically there may be intercellular edema of the spongy layer (spongiosis) and intracellular edema of the epidermis.

Ingestion: Considered an unlikely route of entry in commercial/industrial environments.
The liquid may produce gastrointestinal discomfort and may be harmful if swallowed. Ingestion may result in nausea, pain and vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

Carcinogenicity: NTP - Not listed; IARC - Group 3, Not classifiable as to carcinogenicity to humans; OSHA - Not listed; NIOSH - Not listed; ACGIH - Class A4, Not classifiable as a human carcinogen; EPA - Class D, Not classifiable as to human carcinogenicity; MAK - Not listed.

Chronic Effects: Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes.
Chronic toluene habituation occurs following intentional abuse (glue-sniffing) or from occupational exposure. Ataxia, incoordination and tremors of the hands and feet (as a consequence of diffuse cerebral atrophy), headache, abnormal speech, transient memory loss, convulsions, coma, drowsiness, reduced color perception, frank blindness, nystagmus (rapid, involuntary eye-movements), decreased hearing leading to deafness and mild dementia have all been associated with chronic abuse.
Peripheral nerve damage, encephalopathy, giant axonopathy, electrolyte disturbances in the cerebrospinal fluid and abnormal computer tomographic (CT) scans are common amongst toluene addicts. Although toluene abuse has been linked with kidney disease, this does not commonly appear in cases of occupational toluene exposures. Cardiac and hematological toxicity are however associated with chronic toluene exposure. Cardiac arrhythmia, multifocal and premature ventricular contractions and supraventricular tachycardia are present in 20% of patients who abused toluene-containing paints.
Previous suggestions that chronic toluene inhalation produced human peripheral neuropathy have largely been discounted. However central nervous system (CNS) depression is well documented where blood toluene levels exceed 2.2 mg%. Toluene abusers can achieve transient circulating concentrations of 6.5 mg%. Amongst workers exposed for a median time of 29 years to toluene no subacute effects on neurasthenic complaints and pyschometric test results could be established.
The prenatal toxicity of very high toluene concentrations has been documented for several animal species and man. Malformations indicative of specific teratogenicity have not generally been found. The toxicity described in the literature takes the form of embryo death or delayed fetal growth and delayed skeletal system development. Permanent damage of children has been seen only when mothers had suffered from chronic intoxication as a result of "sniffing".

Section 4 - First Aid Measures

Inhalation: Remove to fresh air.
Lay patient down. Keep warm and rested.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor.



Eye Contact: Immediately hold the eyes open and flush continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids.
Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact: Immediately remove all contaminated clothing, including footwear (after rinsing with water).
Wash affected areas thoroughly with water (and soap if available).
Seek medical attention in event of irritation.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Ingestion: Contact a Poison Control Center.
Do NOT induce vomiting. Give a glass of water.
After first aid, get appropriate in-plant, paramedic, or community medical support.

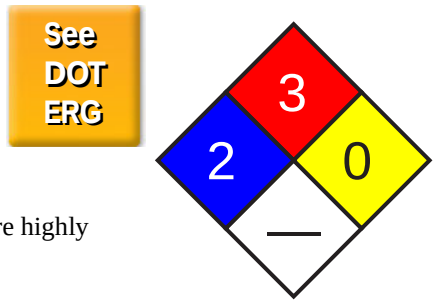
Note to Physicians: Following acute or short-term repeated exposures to toluene:
1. Toluene is absorbed across to alveolar barrier, the blood/air mixture being 11.2/15.6 (at 37 °C) The order of toluene, in expired breath, is of the order of 18 ppm following sustained exposure to 100 ppm.
The tissue/blood proportion is 1/3 except in adipose where the proportion is 8/10.
2.Metabolism by microsomal mono-oxygenation, results in the production of hippuric acid. This may be detected in the urine in amounts between 0.5 and 2.5 g/24hr which represents, on average 0.8 gm/gm of creatinine.
The biological half life of hippuric acid is in the order of 1-2 hours.
3.Primary threat to life from ingestion and/or inhalation is respiratory failure.
4.Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO_2 <50 mm Hg or pCO_2 >50 mm Hg) should be intubated.
5.Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
6.A chest x-ray should be taken immediately after stabilization of breathing and circulation to document aspiration and detect the presence of pneumothorax.
7.Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitization to catecholamines.
Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
8.Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients.
BIOLOGICAL EXPOSURE INDEX - BEI
These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant	Index	Sampling Time	Comments
Hippuric acid in urine	2.5 gm/gm creatinine	End of shift Last 4 hrs of shift	B,NS
Toluene in venous blood	1 mg/L	End of shift	SQ
Toluene in end-exhaled air		End of shift	SQ

NS: Non-specific determinant; also observed after exposure to other material
SQ: Semi-quantitative determinant - Interpretation may be ambiguous; should be used as a screening test or confirmatory test.
B: Background levels occur in specimens collected from subjects NOT exposed.

Section 5 - Fire-Fighting Measures

Flash Point: 4 °C Closed Cup
Autoignition Temperature: 480 °C
LEL: 1.2% v/v
UEL: 7.1% v/v
Extinguishing Media: Foam, dry chemical powder, BCF (where regulations permit), carbon dioxide.
Water spray or fog - Large fires only.
General Fire Hazards/Hazardous Combustion Products: Liquid and vapor are highly flammable.
Severe fire hazard when exposed to heat, flame and/or oxidizers.
Vapor forms an explosive mixture with air.
Severe explosion hazard, in the form of vapor, when exposed to flame or spark. Vapor may travel a considerable distance to source of ignition.
Heating may cause expansion/decomposition with violent rupture of containers.
On combustion, may emit toxic fumes of carbon monoxide (CO) and carbon dioxide (CO_2).



Fire Diamond

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Fire Incompatibility: Avoid contamination with strong oxidizing agents as ignition may result.
Nitric acid with toluene, produces nitrated compounds which are explosive.

Fire-Fighting Instructions: Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
Fight fire from a safe distance, with adequate cover.
If safe, switch off electrical equipment until vapor fire hazard removed.
Use water delivered as a fine spray to control the fire and cool adjacent area. Avoid spraying water onto liquid pools.
Do not approach containers suspected to be hot.
Cool fire-exposed containers with water spray from a protective location.
If safe to do so, remove containers from path of fire.

Section 6 - Accidental Release Measures

Small Spills: Remove all ignition sources. Clean up all spills immediately.
Avoid breathing vapors and contact with skin and eyes.
Control personal contact by using protective equipment.
Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.

See DOT ERG

Large Spills: Clear area of personnel and move upwind.
Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
No smoking, bare lights or ignition sources. Increase ventilation.
Stop leak if safe to do so. Water spray or fog may be used to disperse/absorb vapor. Contain spill with sand, earth or vermiculite.
Use only spark-free shovels and explosion proof equipment.
Collect recoverable product into labeled containers for recycling.
Absorb remaining product with sand, earth or vermiculite.
Collect solid residues and seal in labeled drums for disposal.
Wash area and prevent runoff into drains.
If contamination of drains or waterways occurs, advise emergency services.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Avoid all personal contact, including inhalation.
Wear protective clothing when risk of exposure occurs.
Use in a well-ventilated area. Prevent concentration in hollows and sumps.
DO NOT enter confined spaces until atmosphere has been checked.
Avoid smoking, bare lights, heat or ignition sources.
When handling, DO NOT eat, drink or smoke.
Vapor may ignite on pumping or pouring due to static electricity.
DO NOT use plastic buckets. Ground and secure metal containers when dispensing or pouring product. Use spark-free tools when handling.
Avoid contact with incompatible materials.
Keep containers securely sealed. Avoid physical damage to containers.
Always wash hands with soap and water after handling.
Work clothes should be laundered separately.
Use good occupational work practices. Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

Recommended Storage Methods: Metal can; Metal drum; Metal safety cans. Packing as supplied by manufacturer.
Plastic containers may only be used if approved for flammable liquid.
Check that containers are clearly labeled and free from leaks.

Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use in a well-ventilated area; local exhaust ventilation may be required for safe working, i. e. , to keep exposures below required standards; otherwise, PPE is required.
General exhaust is adequate under normal operating conditions.
Local exhaust ventilation may be required in special circumstances.
If risk of overexposure exists, wear NIOSH-approved respirator. Correct fit is essential to ensure adequate protection.
Provide adequate ventilation in warehouses and enclosed storage areas.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

In confined spaces where there is inadequate ventilation, wear full-face air supplied breathing apparatus.

Personal Protective Clothing/Equipment:

Eyes: Safety glasses with side shields; chemical goggles. Full face shield.
DO NOT wear contact lenses. Contact lenses pose a special hazard; soft contact lenses may absorb irritants and all lenses concentrate them.

Hands/Feet: Wear chemical protective gloves, eg. PVC. Wear safety footwear.

Respiratory Protection:

Exposure Range >200 to <500 ppm: Air Purifying, Negative Pressure, Half Mask
Exposure Range 500 to unlimited ppm: Self-contained Breathing Apparatus, Pressure Demand, Full Face
Cartridge Color: black

Other: Overalls. Barrier cream. Eyewash unit.

Glove Selection Index:

PE/EVAL/PE ..... Best selection
VITON/CHLOROBUTYL ..... Best selection
VITON ..... Best selection
PVA ..... Best selection
TEFLON ..... Satisfactory; may degrade after 4 hours continuous immersion
SARANEX-23 2-PLY..... Poor to dangerous choice for other than short-term immersion
CPE ..... Poor to dangerous choice for other than short-term immersion
VITON/NEOPRENE ..... Poor to dangerous choice for other than short-term immersion
SARANEX-23 ..... Poor to dangerous choice for other than short-term immersion
NEOPRENE/NATURAL..... Poor to dangerous choice for other than short-term immersion
NITRILE+PVC ..... Poor to dangerous choice for other than short-term immersion
NITRILE ..... Poor to dangerous choice for other than short-term immersion
BUTYL ..... Poor to dangerous choice for other than short-term immersion
PVC..... Poor to dangerous choice for other than short-term immersion
NEOPRENE..... Poor to dangerous choice for other than short-term immersion

Section 9 - Physical and Chemical Properties

Appearance/General Info: Clear highly flammable liquid with a strong aromatic odor; floats on water. Mixes with most organic solvents.

Physical State: Liquid
Odor Threshold: 2.14 ppm
Vapor Pressure (kPa): 2.93 at 20 °C
Vapor Density (Air=1): 3.2
Formula Weight: 92.14
Specific Gravity (H_2O=1, at 4 °C): 0.87 at 20 °C
Evaporation Rate: 2.4 (BuAc=1)

pH: Not applicable
pH (1% Solution): Not applicable.
Boiling Point: 111 °C (232 °F) at 760 mm Hg
Freezing/Melting Point: -95 °C (-139 °F)
Volatile Component (% Vol): 100
Water Solubility: < 1 mg/mL at 18 °C

Section 10 - Stability and Reactivity

Stability/Polymerization/Conditions to Avoid: Product is considered stable. Hazardous polymerization will not occur.
Storage Incompatibilities: Segregate from strong oxidizers.

Section 11 - Toxicological Information

Toxicity

Oral (human) LD_{Lo}: 50 mg/kg
Oral (rat) LD_{50}: 636 mg/kg
Inhalation (human) TC_{Lo}: 100 ppm
Inhalation (man) TC_{Lo}: 200 ppm
Inhalation (rat) LC_{50}: > 26700 ppm/1h
Dermal (rabbit) LD_{50}: 12124 mg/kg
Reproductive effector in rats

Irritation

Skin (rabbit): 20 mg/24h-moderate
Skin (rabbit): 500 mg - moderate
Eye (rabbit): 0.87 mg - mild
Eye (rabbit): 2 mg/24h - SEVERE
Eye (rabbit): 100 mg/30sec - mild

See *RTECS* XS 5250000, for additional data.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 12 - Ecological Information

Environmental Fate: If released to soil, it will be lost by evaporation from near-surface soil and by leaching to the groundwater. Biodegradation occurs both in soil and groundwater, but it is apt to be slow especially at high concentrations, which may be toxic to microorganisms. The presence of acclimated microbial populations may allow rapid biodegradation. It will not significantly hydrolyze in soil or water under normal environmental conditions. If released into water, its concentration will decrease due to evaporation and biodegradation. This removal can be rapid or take several weeks, depending on temperature, mixing conditions, and acclimation of microorganisms. It will not significantly adsorb to sediment or bioconcentrate in aquatic organisms. If released to the atmosphere, it will degrade by reaction with photochemically produced hydroxyl radicals (half-life 3 hr to slightly over 1 day) or be washed out in rain. It will not be subject to direct photolysis.

Ecotoxicity: LC_{50} Aedes aegypti-4th instar (mosquito larvae) 22 mg/l /Conditions of bioassay not specified; LC_{50} Cyprinodon variegatus (sheepshead minnow) 277-485 mg/l 96 hr /Conditions of bioassay not specified; LC_{50} Calandra granaria (grain weevil) 210 mg/l /in air; LC_{50} Cancer magister (crab larvae stage I) 28 ppm/96 hr /Conditions of bioassay not specified; LC_{50} Crangon franciscorum (shrimp) 4.3 ppm 96 hr /Conditions of bioassay not specified; LC_{50} Artemia salina (brine shrimp) 33 mg/l 24 hr /Conditions of bioassay not specified; LC_{50} Morone saxatilis (striped bass) 7.3 mg/l 96 hr /Conditions of bioassay not specified; LC_{50} Pimephales promelas (fathead minnows) 55-72 mg/l (embryos), 25-36 mg/l (1-day posthatch protolarvae), and 26-31 mg/l (30-day-old minnows)/ 96 hour /Conditions of bioassay not specified

Henry's Law Constant: 0.0067

BCF: eels 13.2

Biochemical Oxygen Demand (BOD): 0%, 5 days

Octanol/Water Partition Coefficient: log K_{ow} = 2.69

Soil Sorption Partition Coefficient: K_{oc} = silty loam 37

Section 13 - Disposal Considerations

Disposal: Consult manufacturer for recycling options and recycle where possible.
Follow applicable federal, state, and local regulations.
Incinerate residue at an approved site.
Recycle containers where possible, or dispose of in an authorized landfill.

Section 14 - Transport Information

DOT Hazardous Materials Table Data (49 CFR 172.101):



Shipping Name and Description: Toluene
ID: UN1294
Hazard Class: 3 - Flammable and combustible liquid
Packing Group: II - Medium Danger
Symbols:
Label Codes: 3 - Flammable Liquid
Special Provisions: IB2, T4, TP1
Packaging: **Exceptions:** 150 **Non-bulk:** 202 **Bulk:** 242
Quantity Limitations: **Passenger aircraft/rail:** 5 L **Cargo aircraft only:** 60 L
Vessel Stowage: **Location:** B **Other:**

Section 15 - Regulatory Information

EPA Regulations:

RCRA 40 CFR: Listed U220 Toxic Waste
CERCLA 40 CFR 302.4: Listed per CWA Section 311(b)(4), per RCRA Section 3001, per CWA Section 307(a) 1000 lb (453.5 kg)
SARA 40 CFR 372.65: Listed
SARA EHS 40 CFR 355: Not listed
TSCA: Listed

Section 16 - Other Information

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2006-06

Section 1 - Chemical Product and Company Identification 61

Material Name: Xylene
CAS Number: 1330-20-7
Chemical Formula: C_8H_{10}
Structural Chemical Formula: $C_6H_4(CH_3)_2$
EINECS Number: 215-535-7
ACX Number: X1001166-8
Synonyms: BENZENE,DIMETHYL-; COMPONENT 1 (83%): XYLENES; COMPONENT 2 (17%): ETHYL BENZENE; DIMETHYLBENZENE; DIMETHYLBENZENES; EPA PESTICIDE CHEMICAL CODE 086802; KSYLEN; METHYL TOLUENE; METHYLTOLUENE; VIOLET 3; XILOLI; XYLENE; XYLENEN; XYLOL; XYLOLE
General Use: A strong solvent for general use in the manufacture of paints, varnishes, lacquers, thinners, inks, rubber, pesticides, herbicides and paint strippers.

Section 2 - Composition / Information on Ingredients

Name	CAS	%
xylene	1330-20-7	> 95

OSHA PEL
TWA: 100 ppm; 435 mg/m^3.

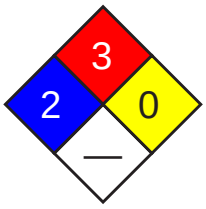
NIOSH REL
TWA: 100 ppm, 435 mg/m^3; STEL: 150 ppm, 655 mg/m^3.

DFG (Germany) MAK
TWA: 100 ppm; PEAK: 200 ppm; skin.

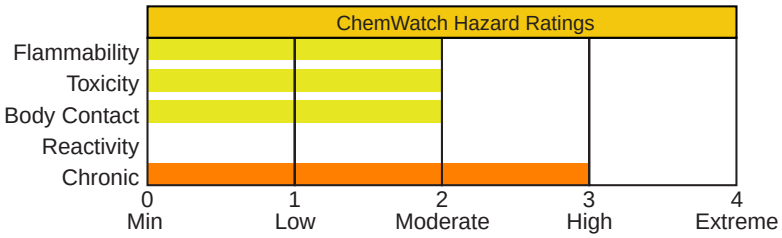
ACGIH TLV
TWA: 100 ppm; STEL: 150 ppm.

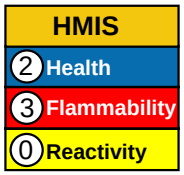
EU OEL
TWA: 50 ppm; STEL: 100 ppm.

Section 3 - Hazards Identification



Fire Diamond





ANSI Signal Word
Warning!


Flammable

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Clear, sweet smelling liquid. Irritating to eyes/skin/respiratory tract. Other Acute Effects: dizziness, nausea, drowsiness. Chronic Effects: dermatitis, kidney/liver/peripheral nerve damage. May cause birth defects (animal data). Flammable.

Potential Health Effects

Target Organs: central nervous system (CNS), eyes, gastrointestinal (GI) tract, liver, kidneys, skin
Primary Entry Routes: inhalation, skin absorption (slight), eye contact, ingestion
Acute Effects
Inhalation: Xylene is a central nervous system depressant. The vapor is discomforting to the upper respiratory tract and may be harmful if inhaled.
Inhalation hazard is increased at higher temperatures.
Toxic effects are increased by consumption of alcohol.
Acute effects from inhalation of high concentrations of vapor are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterized by headache and dizziness, increased reaction time, fatigue and loss of coordination.

Copyright © 2006 by Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.
Headache, fatigue, lassitude, irritability and gastrointestinal disturbances (e.g., nausea, anorexia and flatulence) are the most common symptoms of xylene overexposure. Injury to the heart, liver, kidneys and nervous system has also been noted among workers. Transient memory loss, renal impairment, temporary confusion and some evidence of disturbance of liver function was reported in three workers overcome by gross exposure to xylene (10000 ppm). One worker died and autopsy revealed pulmonary congestion, edema, and focal alveolar hemorrhage.
Volunteers inhaling xylene at 100 ppm for 5 to 6 hours showed changes in manual coordination, reaction time and slight ataxia. Tolerance developed during the workweek but was lost over the weekend. Physical exercise may antagonize this effect. Xylene body burden in humans exposed to 100 or 200 ppm xylene in air depends on the amount of body fat with 4% to 8% of total absorbed xylene accumulating in human adipose tissues.

Eye: The liquid is highly discomforting to the eyes and is capable of causing a mild, temporary redness of the conjunctiva (similar to wind-burn), temporary impairment of vision and/or other transient eye damage/ulceration.
The vapor is highly discomforting to the eyes.
The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
Corneal changes have been reported in furniture polishers exposed to xylene.

Skin: The liquid is highly discomforting to the skin and may cause drying of the skin, which may lead to dermatitis and it is absorbed by the skin.
Toxic effects may result from skin absorption.
Open cuts, abraded or irritated skin should not be exposed to this material.
The material may accentuate any pre-existing skin condition.
The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterized by skin redness (erythema) and swelling (edema) which may progress to vesiculation, scaling and thickening of the epidermis. Histologically there may be intercellular edema of the spongy layer (spongiosis) and intracellular edema of the epidermis.

Ingestion: Considered an unlikely route of entry in commercial/industrial environments.
The liquid may produce gastrointestinal discomfort and may be harmful if swallowed. Ingestion may result in nausea, pain and vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

Carcinogenicity: NTP - Not listed; IARC - Group 3, Not classifiable as to carcinogenicity to humans; OSHA - Not listed; NIOSH - Not listed; ACGIH - Not listed; EPA - Class D, Not classifiable as to human carcinogenicity; MAK - Not listed.

Chronic Effects: Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes.
Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following.
Small excess risks of spontaneous abortion and congenital malformation was reported amongst women exposed to xylene in the first trimester of pregnancy. In all cases however the women had also been exposed to other substances.
Evaluation of workers chronically exposed to xylene has demonstrated a lack of genotoxicity. Exposure to xylene has been associated with increased risks of hemopoietic malignancies but, again simultaneous exposure to other substances (including benzene) complicate the picture. A long-term gavage study of mixed xylenes (containing 17% ethyl benzene) found no evidence of carcinogenic activity in rats and mice of either sex.
Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis).

Section 4 - First Aid Measures

Inhalation: Remove to fresh air.
Lay patient down. Keep warm and rested.
If available, administer medical oxygen by trained personnel.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor, without delay.



Eye Contact: Immediately hold the eyes open and flush continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids.
Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact: Immediately remove all contaminated clothing, including footwear (after rinsing with water).
Wash affected areas thoroughly with water (and soap if available).
Seek medical attention in event of irritation.

Ingestion: Contact a Poison Control Center.
Do NOT induce vomiting. Give a glass of water.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: For acute or short-term repeated exposures to xylene:
1.Gastrointestinal absorption is significant with ingestions.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

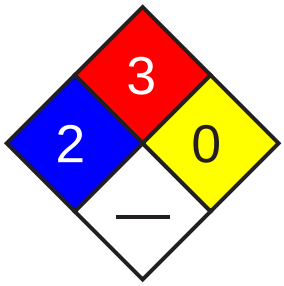
For ingestions exceeding 1-2 mL (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
2.Pulmonary absorption is rapid with about 60-65% retained at rest.
3.Primary threat to life from ingestion and/or inhalation is respiratory failure.
4.Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO_2 <50 mm Hg or pCO_2 >50 mm Hg) should be intubated.
5.Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
6.A chest x-ray should be taken immediately after stabilization of breathing and circulation to document aspiration and detect the presence of pneumothorax.
7.Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitization to catecholamines.
Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
BIOLOGICAL EXPOSURE INDEX - BEI
These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant	Index	Sampling Time	Comments
Methylhippuric acids in urine	1.5 gm/gm creatinine	End of shift	
	2 mg/min	Last 4 hrs of shift.	

Section 5 - Fire-Fighting Measures

Flash Point: 25.6 °C
Autoignition Temperature: 241 °C
LEL: 1.0% v/v
UEL: 7.0% v/v
Extinguishing Media: Alcohol stable foam; dry chemical powder; carbon dioxide.
Water spray or fog - Large fires only.
General Fire Hazards/Hazardous Combustion Products: Liquid and vapor are flammable.
Moderate fire hazard when exposed to heat or flame.
Vapor forms an explosive mixture with air.
Moderate explosion hazard when exposed to heat or flame.
Vapor may travel a considerable distance to source of ignition.
Heating may cause expansion or decomposition leading to violent rupture of containers.
On combustion, may emit toxic fumes of carbon monoxide (CO).
Other combustion products include carbon dioxide (CO_2).
Fire Incompatibility: Avoid contamination with strong oxidizing agents as ignition may result.
Fire-Fighting Instructions: Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways.
If safe, switch off electrical equipment until vapor fire hazard removed.
Use water delivered as a fine spray to control fire and cool adjacent area.
Avoid spraying water onto liquid pools.
Do not approach containers suspected to be hot.
Cool fire-exposed containers with water spray from a protected location.
If safe to do so, remove containers from path of fire.

See DOT ERG



Fire Diamond

Section 6 - Accidental Release Measures

Small Spills: Remove all ignition sources. Clean up all spills immediately.
Avoid breathing vapors and contact with skin and eyes.
Control personal contact by using protective equipment.
Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.
Large Spills: Clear area of personnel and move upwind.
Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways.
No smoking, bare lights or ignition sources. Increase ventilation.

See DOT ERG

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Stop leak if safe to do so. Water spray or fog may be used to disperse/absorb vapor. Contain spill with sand, earth or vermiculite.
Use only spark-free shovels and explosion proof equipment.
Collect recoverable product into labeled containers for recycling.
Absorb remaining product with sand, earth or vermiculite.
Collect solid residues and seal in labeled drums for disposal.
Wash area and prevent runoff into drains.
If contamination of drains or waterways occurs, advise emergency services.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Avoid all personal contact, including inhalation.
Wear protective clothing when risk of overexposure occurs.
Use in a well-ventilated area. Prevent concentration in hollows and sumps.
DO NOT enter confined spaces until atmosphere has been checked.
Avoid smoking, bare lights or ignition sources.
Avoid generation of static electricity. DO NOT use plastic buckets.
Ground all lines and equipment. Use spark-free tools when handling.
Avoid contact with incompatible materials.
When handling, DO NOT eat, drink or smoke.
Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling.
Work clothes should be laundered separately.
Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

Recommended Storage Methods: Metal can; metal drum. Packing as recommended by manufacturer.
Check all containers are clearly labeled and free from leaks.
Plastic containers may only be used if approved for flammable liquids.

Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use in a well-ventilated area. Local exhaust ventilation may be required for safe working, i. e. , to keep exposures below required standards; otherwise, PPE is required.
CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build-up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear.
General exhaust is adequate under normal operating conditions.
Local exhaust ventilation may be required in specific circumstances.
If risk of overexposure exists, wear NIOSH-approved respirator.
Correct fit is essential to obtain adequate protection.
Provide adequate ventilation in warehouse or closed storage areas.
In confined spaces where there is inadequate ventilation, wear full-face air supplied breathing apparatus.

Personal Protective Clothing/Equipment:

Eyes: Safety glasses with side shields; or as required, chemical goggles.
Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Hands/Feet: Barrier cream with polyethylene gloves; Butyl rubber gloves or Neoprene gloves or PVC gloves.
Safety footwear.
Do NOT use this product to clean the skin.

Other: Overalls. Impervious protective clothing.
Eyewash unit.
Ensure there is ready access to an emergency shower.

Glove Selection Index:

PE/EVAL/PE ..... Best selection
PVA ..... Best selection
VITON ..... Best selection
TEFLON ..... Best selection
PVDC/PE/PVDC ..... Poor to dangerous choice for other than short-term immersion
NATURAL+NEOPRENE..... Poor to dangerous choice for other than short-term immersion
NEOPRENE/NATURAL..... Poor to dangerous choice for other than short-term immersion
NITRILE+PVC ..... Poor to dangerous choice for other than short-term immersion
HYPALON ..... Poor to dangerous choice for other than short-term immersion
NAT+NEOPR+NITRILE ..... Poor to dangerous choice for other than short-term immersion
BUTYL ..... Poor to dangerous choice for other than short-term immersion
BUTYL/NEOPRENE ..... Poor to dangerous choice for other than short-term immersion

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

NITRILE..... Poor to dangerous choice for other than short-term immersion
NEOPRENE..... Poor to dangerous choice for other than short-term immersion
PVC..... Poor to dangerous choice for other than short-term immersion

Section 9 - Physical and Chemical Properties

Appearance/General Info: Clear colorless flammable liquid with a strong aromatic odor; floats on water. Mixes with most organic solvents.

Physical State: Liquid
Odor Threshold: 5.00 x10^{-5} ppm
Vapor Pressure (kPa): 0.5 at 15 °C
Vapor Density (Air=1): 3.66 at 15 °C
Formula Weight: 106.18
Specific Gravity (H_2O=1, at 4 °C): 0.87 at 15 °C
Evaporation Rate: 0.7 Bu Ac=1

pH: Not applicable
pH (1% Solution): Not applicable.
Boiling Point: 137 °C (279 °F) to 140 °C (284 °F)
Freezing/Melting Point: -47 °C (-53 °F)
Volatile Component (% Vol): 100
Water Solubility: Practically insoluble in water

Section 10 - Stability and Reactivity

Stability/Polymerization/Conditions to Avoid: Product is considered stable. Hazardous polymerization will not occur.
Storage Incompatibilities: Avoid storage with oxidizers.

Section 11 - Toxicological Information

Toxicity
Oral (human) LD_{Lo}: 50 mg/kg
Oral (rat) LD_{50}: 4300 mg/kg
Inhalation (human) TC_{Lo}: 200 ppm
Inhalation (man) LC_{Lo}: 10000 ppm/6h
Inhalation (rat) LC_{50}: 5000 ppm/4h
Reproductive effector in rats

Irritation
Skin (rabbit):500 mg/24h moderate
Eye (human): 200 ppm irritant
Eye (rabbit): 87 mg mild
Eye (rabbit): 5 mg/24h SEVERE

See *RTECS* ZE 2100000, for additional data.

Section 12 - Ecological Information

Environmental Fate: Most of the xylenes are released into the atmosphere where they may photochemically degrade by reaction with hydroxyl radicals (half-life 1-18 hr). The dominant removal process in water is volatilization. Xylenes are moderately mobile in soil and may leach into groundwater where they are known to persist for several years, despite some evidence that they biodegrade in both soil and groundwater. Bioconcentration is not expected to be significant.
Ecotoxicity: LC_{50} Rainbow trout 13.5 mg/l/96 hr /Conditions of bioassay not specified; LD_{50} Goldfish 13 mg/l/24 hr /Conditions of bioassay not specified
Henry's Law Constant: 0.22
BCF: estimated at 2.14 to 2.20
Octanol/Water Partition Coefficient: log K_{ow} = 3.12 to 3.20
Soil Sorption Partition Coefficient: K_{OC} = 48 to 68

Section 13 - Disposal Considerations

Disposal: Consult manufacturer for recycling options and recycle where possible.
Follow applicable federal, state, and local regulations.
Incinerate residue at an approved site.
Recycle containers where possible, or dispose of in an authorized landfill.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 14 - Transport Information

DOT Hazardous Materials Table Data (49 CFR 172.101):

Note: This material has multiple possible HMT entries. Choose the appropriate one based on state and condition of specific material when shipped.

Shipping Name and Description: Xylenes
ID: UN1307
Hazard Class: 3 - Flammable and combustible liquid
Packing Group: II - Medium Danger
Symbols:
Label Codes: 3 - Flammable Liquid
Special Provisions: IB2, T4, TP1
Packaging: **Exceptions:** 150 **Non-bulk:** 202 **Bulk:** 242
Quantity Limitations: **Passenger aircraft/rail:** 5 L **Cargo aircraft only:** 60 L
Vessel Stowage: **Location:** B **Other:**



Shipping Name and Description: Xylenes
ID: UN1307
Hazard Class: 3 - Flammable and combustible liquid
Packing Group: III - Minor Danger
Symbols:
Label Codes: 3 - Flammable Liquid
Special Provisions: B1, IB3, T2, TP1
Packaging: **Exceptions:** 150 **Non-bulk:** 203 **Bulk:** 242
Quantity Limitations: **Passenger aircraft/rail:** 60 L **Cargo aircraft only:** 220 L
Vessel Stowage: **Location:** A **Other:**



Section 15 - Regulatory Information

EPA Regulations:

RCRA 40 CFR: Listed U239 Ignitable Waste
CERCLA 40 CFR 302.4: Listed per CWA Section 311(b)(4), per RCRA Section 3001 100 lb (45.35 kg)
SARA 40 CFR 372.65: Listed
SARA EHS 40 CFR 355: Not listed
TSCA: Listed

Section 16 - Other Information

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2006-06

Section 1 - Chemical Product and Company Identification 61

Material Name: Arsenic **CAS Number:** 7440-38-2
Chemical Formula: As
Structural Chemical Formula: As_4
EINECS Number: 231-148-6
ACX Number: X1002785-7
Synonyms: ARSEN; ARSENIA; ARSENIC; ARSENIC-75; ARSENIC BLACK; ARSENICALS; COLLOIDAL ARSENIC; GRAY ARSENIC; GREY ARSENIC; METALLIC ARSENIC
General Use: In metallurgy for hardening copper, lead alloys. In the manufacture of certain types of glass.

Section 2 - Composition / Information on Ingredients

Name	CAS	%
Arsenic		>98

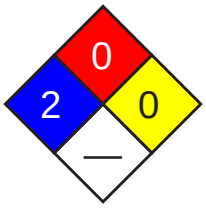
OSHA PEL
TWA: 0.01 mg/m^3.

NIOSH REL
Ceiling: 0.002 mg/m^3 (15-minute).

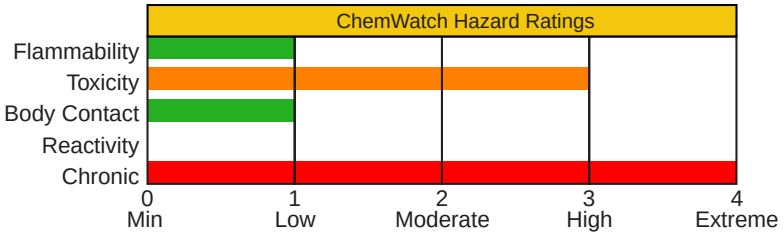
ACGIH TLV
TWA: 0.01 mg/m^3.

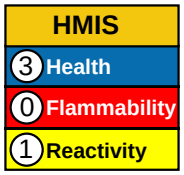
IDLH Level
5 mg/m^3 (as As).

Section 3 - Hazards Identification



Fire Diamond





ANSI Signal Word

Warning!


Flammable

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Brittle, crystalline, silvery-black metal. Irritating to eyes/skin/respiratory tract. Chronic Effects: damage to blood-forming organs, nervous/cardiovascular systems effects. Cancer hazard. Powder is flammable.

Potential Health Effects

Target Organs: liver, kidneys, skin, lungs, lymphatic system
Primary Entry Routes: inhalation, ingestion of dust and fumes, skin absorption
Acute Effects

Inhalation: The dust is toxic and discomforting to the upper respiratory tract and lungs.
Acute inhalation exposure can cause cough, chest pain, shortness of breath, dizziness, headache, pulmonary edema and extreme general weakness.
Prolonged or repeated exposure can cause perforation of the nasal septum.
High exposures can cause poor appetite, nausea, vomiting and muscle cramps. Heart effects with abnormal EKG can also occur with very high exposures.

Eye: The dust may produce eye discomfort causing smarting, pain and redness.

Skin: The material is moderately discomforting to the skin and may be harmful.
Exposure may result in abnormal redness (caused by capillary congestion), burning, itching, swelling, skin eruptions and dermatitis.
Toxic effects may result from skin absorption.
Repeated skin contact can cause thickened skin and/or patchy areas of darkening and loss of pigment. Some persons develop white lines on the nails.

Copyright © 2006 by Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Ingestion: The solid/dust is discomforting to the gastrointestinal tract and is toxic and may be fatal if swallowed. Symptoms of acute poisoning by ingestion, which develop within 4 hours include epigastric pain, vomiting and watery diarrhea. Blood may appear in vomitus and stools. If amount ingested is sufficiently high, shock may develop, followed by death within 24 hours.
Considered an unlikely route of entry in commercial/industrial environments.

Carcinogenicity: NTP - Class 1, Known to be a carcinogen; IARC - Group 1, Carcinogenic to humans; OSHA - Listed as a carcinogen; NIOSH - Listed as carcinogen; ACGIH - Class A1, Confirmed human carcinogen; EPA - Class A, Human carcinogen; MAK - Class A1, Capable of inducing malignant tumors as shown by experience with humans.

Chronic Effects: Symptoms of chronic poisoning by inhalation include weight loss, nausea and diarrhea alternating with constipation, pigmentation and eruption of the skin, loss of hair, peripheral neuritis, blood disorders (anemia), striations on fingernails and toenails.
Long-term exposure can cause an ulcer or hole in the `bone' dividing the inner nose. Hoarseness and sore eyes also occur.
High or repeated exposure can cause nerve damage with `pins and needles', burning, numbness, and later weakness of arms and legs. Repeated exposure can also damage the liver, causing narrowing of the blood vessels, or interfere with the bone marrow's ability to make red blood cells.
Many cases of skin cancer have been reported among people exposed to arsenic through medical treatment with inorganic trivalent arsenic compounds. In some instances skin cancers have occurred in combination with other cancers, such as liver angiosarcoma, intestinal and urinary bladder carcinomas and meningioma. Epidemiological studies of cancer after medical treatment have shown an excess of skin cancers but no clear association with other cancers has been shown. An association between environmental exposure to arsenic through drinking water and skin cancer has been observed and confirmed. Epidemiological studies in areas where drinking water contained 0.35-1.14 mg/l arsenic elevated risks for cancers of the bladder, kidney, skin, liver, lung and colon in both men and women. Occupational exposure to inorganic arsenic, especially in mining and copper smelting, has consistently been associated with an increased risk of cancer. An almost tenfold increase in the incidence of lung cancer was found in workers most heavily exposed to arsenic and relatively clear dose-response relationships have been obtained with regard to cumulative exposure. Other smelter worker populations have been shown to have consistent increases in lung cancer incidence, as well as increases of about 20% in the incidence of gastrointestinal cancer and of 30% for renal cancer and hematolymphatic malignancies.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air. Lay patient down. Keep warm and rested.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor.

See DOT ERG

Eye Contact: Immediately hold the eyes open and wash continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact: Quickly but gently, wipe material off skin with a dry, clean cloth.
Immediately remove all contaminated clothing, including footwear.
Wash affected areas with water (and soap if available) for at least 15 minutes. Transport to hospital or doctor.

Ingestion: Contact a Poison Control Center.
If swallowed, and if more than 15 minutes from a hospital, induce vomiting, preferably using Ipecac Syrup APF.
Note: DO NOT INDUCE VOMITING in an unconscious person

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: For acute or short term repeated exposures to arsenic, soluble compounds:
Treat as per arsenic poisoning.
1. Acute skin lesions such as contact dermatitis usually do not require other treatment than removal from exposure.
2. If more severe symptoms of the respiratory system, the skin or the gastrointestinal tract occur, British Anti-Lewisite (BAL, dimercaprol) may be given. Prompt administration in such cases is vital; to obtain maximum benefit such treatment should be administered within 4 hours of poisoning.
3. In addition, general treatment such as prevention of further absorption from the gastrointestinal tract are mandatory.
4. General supportive therapy such as maintenance of respiration and circulation, maintenance of water and electrolyte balance and control of nervous system effects, as well as elimination of absorbed poison through dialysis and exchange transfusion, may be used if feasible.
5. Dimercaprol is given by deep intramuscular injection as a 5% solution in peanut oil (or a 10% solution with benzyl-benzoate in vegetable oil). It is usually given in a dose of 3 mg/kg, 4-hourly, for the first two days, or twice daily for up to seven days.
6. BAL Therapy is effective for hematological manifestations of chronic arsenic poisoning but not for neurological symptoms. Watch for side effects (e.g. urticaria, burning sensation in the lips, mouth and throat, fever, conjunctivitis etc).
7. Some relief results from administration of diphenhydramine (Benadryl) (1.5 mg/kg intramuscularly or by mouth every 6 hour).

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

BIOLOGICAL EXPOSURE INDEX - BEI

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant	Index	Sampling Time	Comments
Inorganic arsenic metabolites in urine	50 ug/g creatinine	End of workweek	B

B: Background levels occur in specimens collected from subjects NOT exposed

Consult specific documentation.

Section 5 - Fire-Fighting Measures

Flash Point: Noncombustible solid

Extinguishing Media: Use fire fighting procedures suitable for surrounding area.

General Fire Hazards/Hazardous Combustion Products: Solid which exhibits difficult combustion or is difficult to ignite.

Avoid generating dust, particularly clouds of dust in a confined or unventilated space.

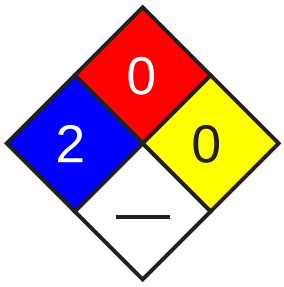
Dust may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion.

Dry dust can be charged electrostatically by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport. Build-up of electrostatic charge may be prevented by bonding and grounding.

Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting.

Decomposes on heating and produces toxic fumes of arsenic oxides (AsO_x).

See DOT ERG



Fire Diamond

Fire Incompatibility: Avoid contact with acids, oxidizing agents, halogens.

Fire-Fighting Instructions: Contact fire department and tell them location and nature of hazard.

Wear breathing apparatus plus protective gloves for fire only. Prevent, by any means available, spillage from entering drains or waterways.

Use fire fighting procedures suitable for surrounding area.

Do not approach containers suspected to be hot.

Cool fire exposed containers with water spray from a protected location.

If safe to do so, remove containers from path of fire.

Equipment should be thoroughly decontaminated after use.

Section 6 - Accidental Release Measures

Small Spills: Clean up all spills immediately. Wear protective clothing, impervious gloves and safety glasses. Increase ventilation.

Use a vacuum or a wet method to reduce dust during clean-up. DO NOT dry sweep.

Place in suitable containers for disposal.

Wash area down with large quantity of water and prevent runoff into drains.

See DOT ERG

Large Spills: POLLUTANT -contain spillage. Clear area of personnel and move upwind.

Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways.

If contamination of drains or waterways occurs, advise emergency services.

Shut off all possible sources of ignition and increase ventilation.

Stop leak if safe to do so.

Contain spill with sand, earth or vermiculite.

Use dry clean up procedures and avoid generating dust.

Collect recoverable product into labeled containers for recycling. Collect residues and seal in labeled drums for disposal.

Wash area down with large quantity of water and prevent runoff into drains.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

Use good occupational work practice.

Avoid contact with skin and eyes.

Avoid generating and breathing dust.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Use in a well-ventilated area.
Wear protective clothing when risk of exposure occurs.
Avoid sources of heat. Avoid contact with incompatible materials. Avoid physical damage to containers.
Keep containers securely sealed when not in use.
When handling, DO NOT eat, drink or smoke.
Wash hands with soap and water after handling.
Work clothes should be laundered separately: NOT at home.

Recommended Storage Methods: Glass container. Plastic drum. Polyethylene or polypropylene container. Steel drum. Metal drum.
Check that containers are clearly labeled.

Storage Requirements: Observe manufacturer's storing and handling recommendations.
Store in a cool, dry place. Store in a well-ventilated area. Store away from sources of heat or ignition/bare lights. Avoid storage at temperatures higher than 60 °C. Store away from incompatible materials. Store away from foodstuff containers.
Protect containers against physical damage.
Keep containers securely sealed.
Check regularly for spills and leaks.

Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: General exhaust is adequate under normal operating conditions.
Local exhaust ventilation may be required.
Use ventilated helmet or air-line hood to provide clean air at the breathing zone.
If risk of overexposure exists, wear NIOSH approved respirator. Correct fit is essential to obtain adequate protection.

Personal Protective Clothing/Equipment:

Eyes: Safety glasses. Chemical goggles.
Full face shield.
Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Hands/Feet: Impervious, gauntlet length gloves; Rubber gloves. Neoprene gloves.
Rubber boots.

Respiratory Protection:
Exposure Range >0.01 to 0.1 mg/m^3: Air Purifying, Negative Pressure, Half Mask
Exposure Range >0.1 to 1 mg/m^3: Air Purifying, Negative Pressure, Full Face
Exposure Range >1 to <5 mg/m^3: Supplied Air, Constant Flow/Pressure Demand, Full Face
Exposure Range 5 to unlimited mg/m^3: Self-contained Breathing Apparatus, Pressure Demand, Full Face
Cartridge Color: magenta (P100)

Other: Overalls. PVC apron. PVC protective suit may be required if exposure severe.
Eyewash unit. Ensure there is ready access to a safety shower.
* Preplacement and periodic medical examinations are essential for workers exposed to arsenic. Preplacement physical examinations should give particular attention to allergic and chronic skin lesions, eye disease, psoriasis, chronic eczematous dermatitis, hyperpigmentation of the skin, keratosis and warts, baseline weight, baseline blood and hemoglobin counts, baseline urinary arsenic determinations.
Annual physical examinations should give attention to general health, weight, skin condition, and any evidence of excessive exposure or absorption of arsenic.

Section 9 - Physical and Chemical Properties

Appearance/General Info: Grey, shiny, brittle, metallic-looking rhombohedral crystals. Can be heated to burn in air with a bluish flame, giving off an odor of garlic and dense white fumes of arsenic trioxide. Loses its luster on exposure to air. Converted by nitric acid or hot sulfuric acid into arsenous or arsenic acid.

Brinell hardness: 147
Mohs' scale: 3.5

Physical State: Divided solid
Vapor Pressure (kPa): Not applicable
Vapor Density (Air=1): Not applicable
Formula Weight: 74.92
Specific Gravity (H_2O=1, at 4 °C): 5.73
Evaporation Rate: Not applicable
pH: Not applicable
pH (1% Solution): Not applicable
Boiling Point: Sublimes
Freezing/Melting Point: 817 °C (1502.6 °F) at 28 atm
Volatile Component (% Vol): Not applicable
Water Solubility: Insoluble

Section 10 - Stability and Reactivity

Stability/Polymerization/Conditions to Avoid: Contact with acids liberates toxic gases. Presence of heat source and ignition source.
Product is considered stable under normal handling conditions. Hazardous polymerization will not occur.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Storage Incompatibilities: Segregate from oxidizing agents, halogens.
Contact with acids produces toxic fumes.

Section 11 - Toxicological Information

Toxicity
Oral (man) TD_{Lo}: 7857 mg/kg/55 years
Oral (rat) LD_{50}: 763 mg/kg
Tumorigenic - Carcinogenic by RTECS criteria.

Irritation
Nil reported

See *RTECS* CG 0525000, for additional data.

Section 12 - Ecological Information

Environmental Fate: No data found.
Ecotoxicity: Food chain concentration potential: Bioaccumulated by fresh water and marine aquatic organisms
BCF: bioaccumulated by aquatic organisms
Biochemical Oxygen Demand (BOD): none

Section 13 - Disposal Considerations

Disposal: Follow all federal, state, and local regulations.

Section 14 - Transport Information

DOT Hazardous Materials Table Data (49 CFR 172.101):



Shipping Name and Description: Arsenic
ID: UN1558
Hazard Class: 6.1 - Poisonous materials
Packing Group: II - Medium Danger
Symbols:
Label Codes: 6.1 - Poison *or* Poison Inhalation Hazard *if inhalation hazard, Zone A or B*
Special Provisions: IB8, IP2, IP4
Packaging: **Exceptions:** None **Non-bulk:** 212 **Bulk:** 242
Quantity Limitations: **Passenger aircraft/rail:** 25 kg **Cargo aircraft only:** 100 kg
Vessel Stowage: **Location:** A **Other:**

Section 15 - Regulatory Information

EPA Regulations:
RCRA 40 CFR: Listed
CERCLA 40 CFR 302.4: Listed per CWA Section 307(a), per CAA Section 112 1 lb (0.454 kg)
SARA 40 CFR 372.65: Listed
SARA EHS 40 CFR 355: Not listed
TSCA: Listed

Section 16 - Other Information

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2006-06

Section 1 - Chemical Product and Company Identification 61

Material Name: Benzene **CAS Number:** 71-43-2
Chemical Formula: C_6H_6
Structural Chemical Formula: C_6H_6
EINECS Number: 200-753-7
ACX Number: X1001488-9
Synonyms: Benzene; BENZENE; (6)ANNULENE; BENZEEN; BENZEN; BENZIN; BENZINE; BENZOL; BENZOL 90; BENZOLE; BENZOLENE; BENZOLO; BICARBURET OF HYDROGEN; CARBON OIL; COAL NAPHTHA; CYCLOHEXATRIENE; EPA PESTICIDE CHEMICAL CODE 008801; FENZEN; MINERAL NAPHTHA; MOTOR BENZOL; NITRATION BENZENE; PHENE; PHENYL HYDRIDE; POLYSTREAM; PYROBENZOL; PYROBENZOLE
General Use: Manufacture of chemicals including styrene, dyes, and many other organic chemicals. Has been used in artificial leather, linoleum, oil cloth, airplane dopes, lacquers; as solvent for waxes, resins, oils etc.
May also be a minor component of gasoline, petrol.
Exposure should be minimized by use in closed systems.
Handling procedures and control measures should be evaluated for exposure before commencement of use in plant operations.

Section 2 - Composition / Information on Ingredients

Name	CAS	%
benzene	71-43-2	99.9

OSHA PEL
TWA: 1 ppm; STEL: 5 ppm.

NIOSH REL
TWA: 0.1 ppm; STEL: 1 ppm.

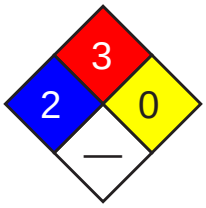
DFG (Germany) MAK
Skin.

ACGIH TLV
TWA: 0.5 ppm; STEL: 2.5 ppm; skin.

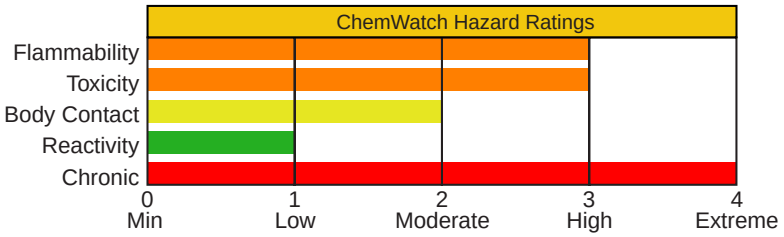
IDLH Level
500 ppm.

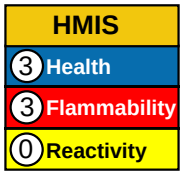
EU OEL
TWA: 1 ppm.

Section 3 - Hazards Identification



Fire Diamond





ANSI Signal Word

Danger!


Flammable

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Colorless liquid; sweet odor. Irritating to eyes/skin/respiratory tract. Toxic. Other Acute Effects: headache, dizziness, drowsiness. Absorbed through skin. Chronic Effects: dermatitis, leukemia, bone marrow damage. Carcinogen. Reproductive effects. Flammable.

Potential Health Effects

Target Organs: blood, central nervous system (CNS), bone marrow, eyes, upper respiratory system, skin
Primary Entry Routes: inhalation, skin contact
Acute Effects
Inhalation: The vapor is discomforting to the upper respiratory tract and lungs and may be harmful if inhaled.

Copyright © 2006 by Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.
Acute effects from inhalation of high concentrations of vapor are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterized by headache and dizziness, increased reaction time, fatigue and loss of coordination.
Inhalation hazard is increased at higher temperatures.
The symptoms of acute exposure to high vapor concentrations include confusion, dizziness, tightening of the leg muscles and pressure over the forehead followed by a period of excitement. If exposure continues the casualty quickly becomes stupefied and lapses into a coma with narcosis.
Effects of inhalation may include nausea, vomiting headache, dizziness, drowsiness, weakness, sometimes preceded by brief periods of exhilaration, or euphoria, irritability, malaise, confusion, ataxia, staggering, weak and rapid pulse, chest pain and tightness with breathlessness, pallor, cyanosis of the lips and fingertips and tinnitus. Severe exposures may produce blurred vision, shallow, rapid breathing, delirium, cardiac arrhythmias, unconsciousness, deep anesthesia, paralysis and coma characterized by motor restlessness, tremors and hyperreflexia (occasionally preceded by convulsions). Polyneuritis and persistent nausea, anorexia, muscular weakness, headache, drowsiness, insomnia and agitation may also occur. Two-three weeks after the exposure, nervous irritability, breathlessness and unsteady gait may still persist; cardiac distress and an unusual dicoloration of the skin may be evident for up to four weeks.
Hemotoxicity is not normally a feature of acute exposures although anemia, thrombocytopenia, petechial hemorrhage, and spontaneous internal bleeding have been reported. Fatal exposures may result from asphyxia, central nervous system depression, cardiac and respiratory failure and circulatory collapse; sudden ventricular fibrillation may also be fatal.
Death may be sudden or may be delayed for 24 hours. Central nervous system, respiratory or hemorrhagic complications may occur up to five days after the exposure and may be lethal; pathological findings include respiratory inflammation with edema, and lung hemorrhage, renal congestion, cerebral edema and extensive petechial hemorrhage in the brain, pleurae, pericardium, urinary tract, mucous membrane and skin.
Exposure to toxic levels has also produced chromosome damage.

Eye: The liquid is highly discomforting to the eyes, may be harmful following absorption and is capable of causing a mild, temporary redness of the conjunctiva (similar to wind-burn), temporary impairment of vision and/or other transient eye damage/ulceration.
The vapor is moderately discomforting to the eyes.
The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

Skin: The liquid may produce skin discomfort following prolonged contact.
Defatting and/or drying of the skin may lead to dermatitis. Open cuts, abraded or irritated skin should not be exposed to this material.
Toxic effects may result from skin absorption.
The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterized by skin redness (erythema) and swelling (edema) which may progress to vesiculation, scaling and thickening of the epidermis. Histologically there may be intercellular edema of the spongy layer (spongiosis) and intracellular edema of the epidermis.

Ingestion: The liquid is discomforting to the gastrointestinal tract and may be harmful if swallowed.
Ingestion may result in nausea, pain, vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

Carcinogenicity: NTP - Class 1, Known to be a carcinogen; IARC - Group 1, Carcinogenic to humans; OSHA - Listed as a carcinogen; NIOSH - Listed as carcinogen; ACGIH - Class A2, Suspected human carcinogen; EPA - Class A, Human carcinogen; MAK - Class A1, Capable of inducing malignant tumors as shown by experience with humans.

Chronic Effects: Liquid is an irritant and may cause burning and blistering of skin on prolonged exposure.
Chronic exposure may cause headache, fatigue, loss of appetite and lassitude with incipient blood effects including anemia and blood changes.
Benzene is a myelotoxicant known to suppress bone-marrow cell proliferation and to induce hematologic disorders in humans and animals.
Signs of benzene-induced aplastic anemia include suppression off leukocytes (leukopenia), red cells (anemia), platelets (thromocytopenia) or all three cell types (pancytopenia). Classic symptoms include weakness, purpura, and hemorrhage. The most significant toxic effect is insidious and often irreversible injury to the blood forming tissue. Leukemia may develop.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air.
Lay patient down. Keep warm and rested.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor.



Eye Contact: Immediately hold the eyes open and flush continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact: Immediately remove all contaminated clothing, including footwear (after rinsing with water).
Wash affected areas thoroughly with water (and soap if available).
Seek medical attention in event of irritation.

Ingestion: Contact a Poison Control Center.
Do NOT induce vomiting. Give a glass of water.

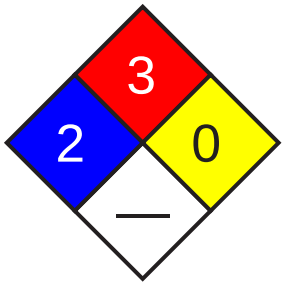
After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: For acute or short-term repeated exposures to petroleum distillates or related hydrocarbons:
1.Primary threat to life from pure petroleum distillate ingestion and/or inhalation is respiratory failure.
2.Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO_2 <50 mm Hg or pCO_2 >50 mm Hg) should be intubated.
3.Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
4.A chest x-ray should be taken immediately after stabilization of breathing and circulation to document aspiration and detect the presence of pneumothorax.
5.Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitization to catecholamines.
Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
6.Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients.
Consider complete blood count. Evaluate history of exposure.

Section 5 - Fire-Fighting Measures

Flash Point: -11 °C Closed Cup
Autoignition Temperature: 562 °C
LEL: 1.3% v/v
UEL: 7.1% v/v
Extinguishing Media: Foam, dry chemical powder, BCF (where regulations permit), carbon dioxide.
Water spray or fog - Large fires only.

See DOT ERG



Fire Diamond

General Fire Hazards/Hazardous Combustion Products: Liquid and vapor are highly flammable.
Severe fire hazard when exposed to heat, flame and/or oxidizers.
Vapor forms an explosive mixture with air.
Severe explosion hazard, in the form of vapor, when exposed to flame or spark. Vapor may travel a considerable distance to source of ignition.
Heating may cause expansion/decomposition with violent rupture of containers.
On combustion, may emit toxic fumes of carbon monoxide (CO).

Fire Incompatibility: Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Fire-Fighting Instructions: Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
Fight fire from a safe distance, with adequate cover.
If safe, switch off electrical equipment until vapor fire hazard removed.
Use water delivered as a fine spray to control fire and cool adjacent area.
Avoid spraying water onto liquid pools.
Do not approach containers suspected to be hot.
Cool fire-exposed containers with water spray from a protected location.
If safe to do so, remove containers from path of fire.
Equipment should be thoroughly decontaminated after use.

Section 6 - Accidental Release Measures

Small Spills: Remove all ignition sources. Clean up all spills immediately.
Avoid breathing vapors and contact with skin and eyes.
Control personal contact by using protective equipment.
Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.

See DOT ERG

Large Spills: Pollutant - contain spillage. Clear area of personnel and move upwind.
Contact fire department and tell them location and nature of hazard.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
No smoking, bare lights or ignition sources. Increase ventilation.
Stop leak if safe to do so. Water spray or fog may be used to disperse/absorb vapor. Contain spill with sand, earth or vermiculite.
Use only spark-free shovels and explosion proof equipment.
Collect recoverable product into labeled containers for recycling.
Absorb remaining product with sand, earth or vermiculite.
Collect solid residues and seal in labeled drums for disposal.
Wash area and prevent runoff into drains.
If contamination of drains or waterways occurs, advise emergency services.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Avoid all personal contact, including inhalation.
Wear protective clothing when risk of exposure occurs.
Use in a well-ventilated area. Prevent concentration in hollows and sumps.
DO NOT enter confined spaces until atmosphere has been checked.
Avoid smoking, bare lights, heat or ignition sources.
When handling, DO NOT eat, drink or smoke.
Vapor may ignite on pumping or pouring due to static electricity.
DO NOT use plastic buckets. Ground and secure metal containers when dispensing or pouring product. Use spark-free tools when handling.
Avoid contact with incompatible materials.
Keep containers securely sealed. Avoid physical damage to containers.
Always wash hands with soap and water after handling.
Work clothes should be laundered separately.
Use good occupational work practices. Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

Recommended Storage Methods: Metal can; metal drum. Packing as recommended by manufacturer.
Check all containers are clearly labeled and free from leaks.

Storage Requirements: Store in original containers in approved flame-proof area.
No smoking, bare lights, heat or ignition sources.
DO NOT store in pits, depressions, basements or areas where vapors may be trapped. Keep containers securely sealed.
Store away from incompatible materials in a cool, dry well ventilated area.
Protect containers against physical damage and check regularly for leaks.
Observe manufacturer's storing and handling recommendations.

Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use in a well-ventilated area. Local exhaust ventilation usually required.
If risk of overexposure exists, wear NIOSH-approved respirator.
Correct fit is essential to obtain adequate protection. NIOSH-approved self contained breathing apparatus (SCBA) may be required in some situations.
Provide adequate ventilation in warehouse or closed storage area.

Personal Protective Clothing/Equipment:

Eyes: Chemical goggles. Full face shield.
Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Hands/Feet: Nitrile gloves; Neoprene gloves.
Safety footwear.
Do NOT use this product to clean the skin.

Respiratory Protection:
Exposure Range >1 to 10 ppm: Air Purifying, Negative Pressure, Half Mask
Exposure Range >10 to 100 ppm: Air Purifying, Negative Pressure, Full Face
Exposure Range >100 to 1000 ppm: Supplied Air, Constant Flow/Pressure Demand, Full Face
Exposure Range >1000 to unlimited ppm: Self-contained Breathing Apparatus, Pressure Demand, Full Face
Cartridge Color: black
Note: must change cartridge at beginning of each shift

Other: Overalls. Eyewash unit. Barrier cream. Skin cleansing cream.

Glove Selection Index:
PE/EVAL/PE ..... Best selection
PVA ..... Best selection
TEFLON ..... Best selection

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

VITON ..... Best selection
VITON/NEOPRENE ..... Best selection
NITRILE+PVC ..... Poor to dangerous choice for other than short-term immersion
BUTYL ..... Poor to dangerous choice for other than short-term immersion
NITRILE ..... Poor to dangerous choice for other than short-term immersion
NEOPRENE ..... Poor to dangerous choice for other than short-term immersion
PVC ..... Poor to dangerous choice for other than short-term immersion
NATURAL RUBBER ..... Poor to dangerous choice for other than short-term immersion
BUTYL/NEOPRENE ..... Poor to dangerous choice for other than short-term immersion

Section 9 - Physical and Chemical Properties

Appearance/General Info: Clear, highly flammable liquid; floats on water. Characteristic aromatic odor. Highly volatile. Mixes with alcohol, chloroform, ether, carbon disulfide, carbon tetrachloride, glacial acetic acid, acetone and oils.

Physical State: Liquid
Odor Threshold: 4.68 ppm
Vapor Pressure (kPa): 9.95 at 20 °C
Vapor Density (Air=1): 2.77
Formula Weight: 78.12
Specific Gravity (H_2O=1, at 4 °C): 0.879 at 20 °C
Evaporation Rate: Fast

pH: Not applicable
pH (1% Solution): Not applicable.
Boiling Point: 80.1 °C (176 °F)
Freezing/Melting Point: 5.5 °C (41.9 °F)
Volatile Component (% Vol): 100
Water Solubility: 0.18 g/100 g of water at 25 °C

Section 10 - Stability and Reactivity

Stability/Polymerization/Conditions to Avoid: Product is considered stable. Hazardous polymerization will not occur.
Storage Incompatibilities: Avoid reaction with oxidizing agents.

Section 11 - Toxicological Information

Toxicity
Oral (man) LD_{Lo}: 50 mg/kg
Oral (rat) LD_{50}: 930 mg/kg
Inhalation (rat) LC_{50}: 10000 ppm/7h
Inhalation (human) LC_{Lo}: 2000 ppm/5m
Inhalation (man) TC_{Lo}: 150 ppm/1y - I
Inhalation (human) TC_{Lo}: 100 ppm
Reproductive effector in rats

Irritation
Skin (rabbit): 20 mg/24 hr - mod
Eye (rabbit): 2 mg/24 hr - SEVERE

See *RTECS* CY 1400000, for additional data.

Section 12 - Ecological Information

Environmental Fate: If released to soil, it will be subject to rapid volatilization near the surface and that which does not evaporate will be highly to very highly mobile in the soil and may leach to groundwater. It may be subject to biodegradation based on reported biodegradation of 24% and 47% of the initial 20 ppm in a base-rich para-brownish soil in 1 and 10 weeks, respectively. It may be subject to biodegradation in shallow, aerobic groundwaters, but probably not under anaerobic conditions. If released to water, it will be subject to rapid volatilization; the half-life for evaporation in a wind-wave tank with a moderate wind speed of 7.09 m/sec was 5.23 hours; the estimated half-life for volatilization from a model river one meter deep flowing 1 m/sec with a wind velocity of 3 m/sec is estimated to be 2.7 hours at 20 °C. It will not be expected to significantly adsorb to sediment, bioconcentrate in aquatic organisms or hydrolyze. It may be subject to biodegradation based on a reported biodegradation half-life of 16 days in an aerobic river die-away test. In a marine ecosystem biodegradation occurred in 2 days after an acclimation period of 2 days and 2 weeks in the summer and spring, respectively, whereas no degradation occurred in winter. According to one experiment, it has a half-life of 17 days due to photodegradation which could contribute to removal in situations of cold water, poor nutrients, or other conditions less conductive to microbial degradation. If released to the atmosphere, it will exist predominantly in the vapor phase. Gas-phase will not be subject to direct photolysis but it will react with photochemically produced hydroxyl radicals with a half-life of 13.4 days calculated using an experimental rate constant for the reaction. The reaction time in polluted atmospheres which contain nitrogen oxides or sulfur dioxide is accelerated with the half-life being reported as 4-6 hours. Products of photooxidation include phenol, nitrophenols, nitrobenzene, formic acid, and peroxyacetyl nitrate. It is fairly soluble in water and is removed from the atmosphere in rain.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Ecotoxicity: LC_{50} Clawed toad (3-4 wk after hatching) 190 mg/l/48 hr /Conditions of bioassay not specified; LC_{50} Morone saxatilis (bass) 5.8 to 10.9 ppm/96 hr /Conditions of bioassay not specified; LC_{50} Poecilia reticulata (guppy) 63 ppm/14 days /Conditions of bioassay not specified; LC_{50} Salmo trutta (brown trout yearlings) 12 mg/l/1 hr (static bioassay); LD_{50} Lepomis macrochirus (bluegill sunfish) 20 mg/l/24 to 48 hr /Conditions of bioassay not specified; LC_{100} Tetrahymena pyriformis (ciliate) 12.8 mmole/l/24 hr /Conditions of bioassay not specified; LC_{50} Cancer magister (crab larvae) stage 1, 108 ppm/96 hr /Conditions of bioassay not specified; LC_{50} Crangon franciscorum (shrimp) 20 ppm/96 hr /Conditions of bioassay not specified

Henry's Law Constant: 5.3×10^{-3}

BCF: eels 3.5

Biochemical Oxygen Demand (BOD): 1.2 lb/lb, 10 days

Octanol/Water Partition Coefficient: log K_{ow} = 2.13

Soil Sorption Partition Coefficient: K_{oc} = woodburn silt loam 31 to 143

Section 13 - Disposal Considerations

Disposal: Consult manufacturer for recycling options and recycle where possible.
Follow applicable federal, state, and local regulations.
Incinerate residue at an approved site.
Recycle containers where possible, or dispose of in an authorized landfill.

Section 14 - Transport Information

DOT Hazardous Materials Table Data (49 CFR 172.101):



Shipping Name and Description: Benzene
ID: UN1114
Hazard Class: 3 - Flammable and combustible liquid
Packing Group: II - Medium Danger
Symbols:
Label Codes: 3 - Flammable Liquid
Special Provisions: IB2, T4, TP1
Packaging: **Exceptions:** 150 **Non-bulk:** 202 **Bulk:** 242
Quantity Limitations: **Passenger aircraft/rail:** 5 L **Cargo aircraft only:** 60 L
Vessel Stowage: **Location:** B **Other:** 40

Section 15 - Regulatory Information

EPA Regulations:

RCRA 40 CFR: Listed U019 Toxic Waste, Ignitable Waste
CERCLA 40 CFR 302.4: Listed per CWA Section 311(b)(4), per RCRA Section 3001, per CWA Section 307(a), per CAA Section 112 10 lb (4.535 kg)
SARA 40 CFR 372.65: Listed
SARA EHS 40 CFR 355: Not listed
TSCA: Listed

Section 16 - Other Information

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

cis-Acetylene Dichloride
DIC4550

Issue Date: 2006-06

Section 1 - Chemical Product and Company Identification 61

Material Name: cis-Acetylene Dichloride **CAS Number:** 156-59-2
Chemical Formula: $C_2H_2Cl_2$
Structural Chemical Formula: CHCl=CHCl
EINECS Number: 205-859-7
ACX Number: X1007815-0
Synonyms: ACETALYNE DICHLORIDE; CIS-ACETYLENE DICHLORIDE; CIS-1,2-DICHLORETHYLENE; CIS-1,2-DICHLOROETHENE; (Z)-1,2-DICHLOROETHYLENE; 1,2-CIS-DICHLOROETHYLENE; CIS-1,2-DICHLOROETHYLENE; CIS-DICHLOROETHYLENE; ETHENE,1,2-DICHLORO-,(Z)-; ETHYLENE,1,2-DICHLORO-,(Z)-
General Use: solvent for waxes, resins, fats, phenol, camphor, acetyl cellulose, organic materials and heat-sensitive substances such as caffeine; in rubber manufacture, as a refrigerant, as an additive to dye and lacquer solutions, in retarding fermentation, in organic synthesis, in medicines, in dye extraction, in chlorination reactions and in the manufacture of artificial pearls; a constituent of perfumes and thermoplastics

Section 2 - Composition / Information on Ingredients

Name	CAS	%
cis-acetylene dichloride	156-59-2	>98

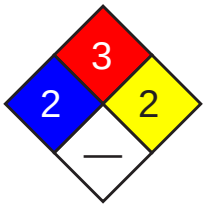
OSHA PEL
TWA: 200 ppm; 790 mg/m^3.

NIOSH REL

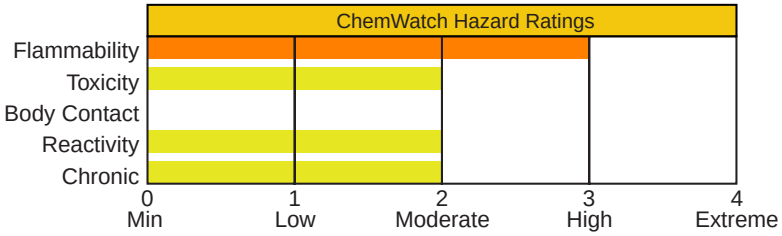
DFG (Germany) MAK
TWA: 200 ppm; PEAK: 400 ppm.

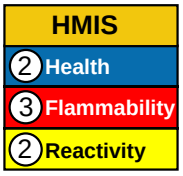
ACGIH TLV
TWA: 200 ppm.

Section 3 - Hazards Identification



Fire Diamond





ANSI Signal Word
Warning!


Flammable

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Colorless liquid; sweetish odor. Irritating to eyes/skin/respiratory tract. Harmful. Other Acute Effects: narcotic effect. Flammable.

Potential Health Effects

Target Organs: eyes, skin, respiratory system, nervous system, liver, kidneys
Primary Entry Routes: inhalation of vapor, skin/eye contact

Copyright © 2006 by Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Acute Effects

Inhalation: There is a single report of an industrial poisoning, a fatality caused by the inhalation of a vapor in a small enclosure. Acute intoxication by halogenated aliphatic hydrocarbons appears to take place over two stages. Signs of a reversible narcosis are evident in the first stage and in the second stage signs of injury to organs may become evident, a single organ alone is (almost) never involved. Depression of the central nervous system is the most outstanding effect of most halogenated aliphatic hydrocarbons. Inebriation and excitation, passing into narcosis, is a typical reaction. In severe acute exposures there is always a danger of death from respiratory failure or cardiac arrest due to a tendency to make the heart more susceptible to catecholamines (adrenalin). The most important effects of exposure are narcosis and irritation of the central nervous system. Liver responses may occur after repeated narcotic doses and involves fatty liver degeneration. Vapor exposure may produce central nervous system depression or in milder exposures, nausea, vomiting, weakness, tremor and epigastric cramps. Recovery is usually rapid.

Eye: The vapor when concentrated has pronounced eye irritation effect; this gives some warning of high vapor concentrations. If eye irritation occurs seek to reduce exposure with available control measures, or evacuate area. Exposure to the trans isomer at 2200 ppm caused burning of the eyes, vertigo, nausea. Reversible corneal clouding has been described in exposures to acetylene dichloride.

Skin: The liquid may produce skin discomfort following prolonged contact. Defatting and/ or drying of the skin may lead to dermatitis.

Ingestion: The liquid is discomforting to the gastrointestinal tract and toxic if swallowed. Considered an unlikely route of entry in commercial/industrial environments.

Carcinogenicity: NTP - Not listed; IARC - Not listed; OSHA - Not listed; NIOSH - Not listed; ACGIH - Not listed; EPA - Class D, Not classifiable as to human carcinogenicity; MAK - Not listed.

Chronic Effects: The material may accumulate in the human body and progressively cause tissue damage.

Section 4 - First Aid Measures

Inhalation: • If fumes or combustion products are inhaled, remove to fresh air.
• Lay patient down. Keep warm and rested.
• If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
• Transport to hospital or doctor.

See DOT ERG

Eye Contact: • Immediately hold the eyes open and flush continuously for at least 15 minutes with fresh running water.
• Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
• Transport to hospital or doctor without delay.
• Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact: • Immediately remove all contaminated clothing, including footwear (after rinsing with water).
• Wash affected areas thoroughly with water (and soap if available).
• Seek medical attention in event of irritation.

Ingestion: Contact a Poison Control Center. Do NOT induce vomiting. Give a glass of water.

After first aid, get appropriate in-plant, paramedic, or community medical support.

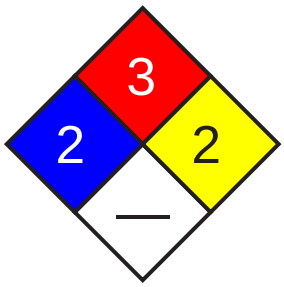
Note to Physicians: Treatment should follow that practiced in carbon tetrachloride exposures:
• Acute exposures to carbon tetrachloride present, initially, with CNS depression followed by hepatic and renal dysfunction.
• Respiratory depression and cardiac dysrhythmias are an immediate threat to life.
• Since a major fraction of absorbed carbon tetrachloride is exhaled in first hour, good tidal volumes should be maintained in severely poisoned patients; hyperventilation may be an additional therapeutic modality.
• Ipecac syrup, lavage, activated charcoal or catharsis may all be used in the first 4 hours.
• Since reactive metabolites may cause hepatorenal toxicity, administration of N-acetyl-L-cysteine may reduce complications. Experience with this therapy is limited.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 5 - Fire-Fighting Measures

Flash Point: 2.2 to 3.9 °C Closed Cup
Autoignition Temperature: 460 °C
LEL: 9.7% v/v
UEL: 12.8% v/v
Extinguishing Media: Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide. Water spray or fog - Large fires only.

See DOT ERG



Fire Diamond

General Fire Hazards/Hazardous Combustion Products: • Liquid and vapor are highly flammable.
• Severe fire hazard when exposed to heat, flame and/or oxidizers.
• Vapor forms an explosive mixture with air.
• Severe explosion hazard, in the form of vapor, when exposed to flame or spark.
• Vapor may travel a considerable distance to source of ignition.
• Heating may cause expansion/decomposition with violent rupture of containers.
• On combustion, may emit toxic fumes of carbon monoxide (CO). Other combustion products include hydrogen chloride and phosgene.
Fire Incompatibility: Avoid contamination with oxidizing agents i.e., nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.
Fire-Fighting Instructions: • Contact fire department and tell them location and nature of hazard.
• May be violently or explosively reactive.
• Wear breathing apparatus plus protective gloves.
• Prevent, by any means available, spillage from entering drains or waterways.
• Consider evacuation (or protect in place).
• Fight fire from a safe distance, with adequate cover.
• If safe, switch off electrical equipment until vapor fire hazard removed.
• Use water delivered as a fine spray to control the fire and cool adjacent area.
• Avoid spraying water onto liquid pools.
• Do not approach containers suspected to be hot.
• Cool fire-exposed containers with water spray from a protected location.
• If safe to do so, remove containers from path of fire.

Section 6 - Accidental Release Measures

See DOT ERG

Small Spills: • Remove all ignition sources.
• Clean up all spills immediately.
• Avoid breathing vapors and contact with skin and eyes.
• Control personal contact by using protective equipment.
• Contain and absorb small quantities with vermiculite or other absorbent material.
• Wipe up.
• Collect residues in a flammable waste container.
Large Spills: • Clear area of personnel and move upwind.
• Contact fire department and tell them location and nature of hazard.
• May be violently or explosively reactive.
• Wear breathing apparatus plus protective gloves.
• Prevent, by any means available, spillage from entering drains or waterways.
• No smoking, bare lights or ignition sources.
• Increase ventilation.
• Stop leak if safe to do so.
• Water spray or fog may be used to disperse/absorb vapor.
• Contain spill with sand, earth or vermiculite.
• Use only spark-free shovels and explosion proof equipment.
• Collect recoverable product into labeled containers for recycling.
• Absorb remaining product with sand, earth or vermiculite.
• Collect solid residues and seal in labeled drums for disposal.
• Wash area and prevent runoff into drains.
• If contamination of drains or waterways occurs, advise emergency services.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: • Avoid all personal contact, including inhalation.
• Wear protective clothing when risk of exposure occurs.
• Use in a well-ventilated area.
• Prevent concentration in hollows and sumps.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

• DO NOT enter confined spaces until atmosphere has been checked.
• Avoid smoking, bare lights or ignition sources.
• Avoid contact with incompatible materials.
• When handling, DO NOT eat, drink or smoke.
• Keep containers securely sealed when not in use.
• Avoid physical damage to containers.
• Always wash hands with soap and water after handling.
• Work clothes should be laundered separately.
• Follow good occupational work practices.
• Observe manufacturer's storage and handling recommendations.
• Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

Recommended Storage Methods: Check that containers are clearly labeled. Packaging as recommended by manufacturer. DO NOT use aluminum or galvanized containers.

Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Local exhaust ventilation usually required. If risk of overexposure exists, wear NIOSH-approved respirator. Provide adequate ventilation in warehouse or closed storage area.

Personal Protective Clothing/Equipment:

Eyes: Safety glasses with side shields or, as required, chemical goggles. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Hands/Feet: Butyl rubber gloves. Neoprene gloves.

Respiratory Protection: Respirator protection may be required. Consult your supervisor.

Other: • Overalls.
• Barrier cream.
• Eyewash unit.

Glove Selection Index:

VITON ..... Poor to dangerous choice for other than short-term immersion

Section 9 - Physical and Chemical Properties

Appearance/General Info: Colorless liquid with pleasant chloroform-like odor.

Physical State: colorless liquid
Odor Threshold: 0.085 ppm
Vapor Pressure (kPa): 200 mm Hg at 25 °C
Vapor Density (Air=1): 3.34
Formula Weight: 96.94
Specific Gravity (H_2O=1, at 4 °C): 1.2837 at 20 °C/4 °C
Boiling Point: 60.3 °C (141 °F) at 760 mm Hg
Freezing/Melting Point: -80.5 °C (-112.9 °F)
Water Solubility: 1 to 5 mg/mL at 16 °C

Section 10 - Stability and Reactivity

Stability/Polymerization/Conditions to Avoid: Product is considered stable. Hazardous polymerization will not occur.

Storage Incompatibilities: Avoid reaction with oxidizing agents. Acetylene dichloride in contact with solid caustic alkalies or their concentrated solutions will form chloracetylene which ignites in air. Haloalkenes are highly reactive.

Section 11 - Toxicological Information

Toxicity

Inhalation (mouse) LC_{Lo}: 65000 mg/m^3/2 hr

Rat liver cell mutagen in vitro

Irritation

Nil reported

See *RTECS* KV9420000, for additional data.

Section 12 - Ecological Information

Environmental Fate: If released on soil, it should evaporate and/or leach into the groundwater where very slow biodegradation should occur. If released into water, it will be lost mainly through volatilization (half life 3 hr in a model river). Biodegradation, adsorption to sediment, and bioconcentration in aquatic organisms should not be significant. In the atmosphere it will be lost by reaction with photochemically produced hydroxyl radicals (half life 8 days) and scavenged by rain. Because it is relatively long lived in the atmosphere, considerable dispersal from source areas should occur.

Ecotoxicity: LC_{50} Lepomis machrochirus (bluegill) 135,000 ug/l/96 hr in a static unmeasured bioassay

Henry's Law Constant: estimated at 0.00337

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

BCF: calculated at 15
Octanol/Water Partition Coefficient: log K_{ow} = 1.86
Soil Sorption Partition Coefficient: K_{oc} = 49

Section 13 - Disposal Considerations

Disposal: • Consult manufacturer for recycling options and recycle where possible.
• Follow applicable local, state, and federal regulations.
• Incinerate residue at an approved site.
• Recycle containers if possible, or dispose of in an authorized landfill.

Section 14 - Transport Information

DOT Hazardous Materials Table Data (49 CFR 172.101):



Shipping Name and Description: 1,2-Dichloroethylene
ID: UN1150
Hazard Class: 3 - Flammable and combustible liquid
Packing Group: II - Medium Danger
Symbols:
Label Codes: 3 - Flammable Liquid
Special Provisions: IB2, T7, TP2
Packaging: **Exceptions:** 150 **Non-bulk:** 202 **Bulk:** 242
Quantity Limitations: **Passenger aircraft/rail:** 5 L **Cargo aircraft only:** 60 L
Vessel Stowage: **Location:** B **Other:**

Section 15 - Regulatory Information

EPA Regulations:
RCRA 40 CFR: Not listed
CERCLA 40 CFR 302.4: Not listed
SARA 40 CFR 372.65: Not listed
SARA EHS 40 CFR 355: Not listed
TSCA: Listed

Section 16 - Other Information

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2006-06

Section 1 - Chemical Product and Company Identification 61

Material Name: Ethylbenzene **CAS Number:** 100-41-4
Chemical Formula: C_8H_{10}
Structural Chemical Formula: $C_6H_5 \cdot C_2H_5$
EINECS Number: 202-849-4
ACX Number: X1003016-1
Synonyms: AETHYLBENZOL; BENZENE,ETHYL-; EB; ETHYL BENZENE; ETHYLBENZEEN; ETHYLBENZENE; ETHYLBENZOL; ETILBENZENE; ETYLOBENZEN; PHENYLETHANE
General Use: Used in the manufacture of cellulose acetate, styrene and synthetic rubber; solvent or diluent; component of automotive and aviation gasoline.
Component of many petroleum hydrocarbon solvents, thinners.
The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.

Section 2 - Composition / Information on Ingredients

Name	CAS	%
ethylbenzene	100-41-4	>95

OSHA PEL
TWA: 100 ppm; 435 mg/m^3.

ACGIH TLV
TWA: 100 ppm; STEL: 125 ppm.

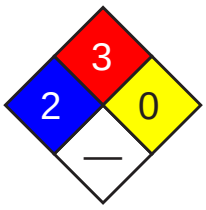
EU OEL
TWA: 100 ppm; STEL: 200 ppm.

NIOSH REL
TWA: 100 ppm (435 mg/m^3); STEL: 125 ppm (545 mg/m^3).

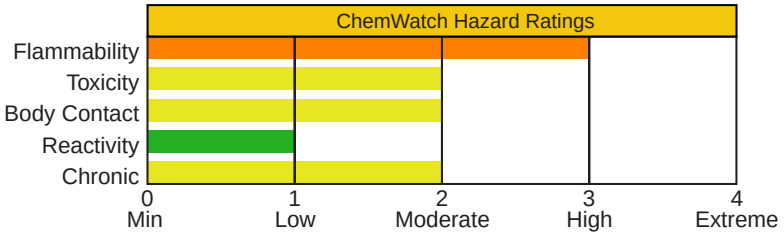
IDLH Level
800 ppm (10% LEL).

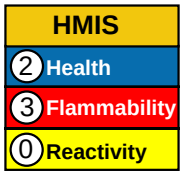
DFG (Germany) MAK
Skin.

Section 3 - Hazards Identification



Fire Diamond





ANSI Signal Word
Warning!


Flammable

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Colorless liquid; pungent odor. Irritating to eyes/skin/respiratory tract. Other Acute Effects: chest constriction, vertigo, narcosis, cramps, respiratory paralysis. Chronic Effects: fatigue, sleepiness, headache, blood disorders, lymphocytosis. Flammable.

Potential Health Effects

Target Organs: eyes, respiratory system, skin, central nervous system (CNS), blood
Primary Entry Routes: inhalation, skin contact, eye contact
Acute Effects
Inhalation: The vapor is discomforting to the upper respiratory tract.
Inhalation hazard is increased at higher temperatures.
Acute effects from inhalation of high concentrations of vapor are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterized by headache and dizziness, increased reaction time, fatigue and loss of coordination.

Copyright © 2006 by Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.
Inhalation of vapor may aggravate a pre-existing respiratory condition such as asthma, bronchitis, emphysema.
When humans were exposed to the 100 and 200 ppm for 8 hours about 45-65% is retained in the body. Only traces of unchanged ethyl benzene are excreted in expired air following termination of inhalation exposure.
Humans exposed to concentrations of 23-85 ppm excreted most of the retained dose in the urine (mainly as metabolites).
Guinea pigs that died from exposure had intense congestion of the lungs and generalized visceral hyperemia. Rats exposed for three days at 8700 mg/m^3 (2000 ppm) showed changes in the levels of dopamine and noradrenaline in various parts of the brain.

Eye: The liquid is highly discomforting to the eyes and is capable of causing a mild, temporary redness of the conjunctiva (similar to wind-burn), temporary impairment of vision and/or other transient eye damage/ulceration.
The vapor is discomforting to the eyes.
The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
Two drops of the material in to the conjunctival sac produced only slight irritation of the conjunctival membrane but no corneal injury.

Skin: The liquid is discomforting to the skin if exposure is prolonged and is capable of causing skin reactions which may lead to dermatitis.
The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterized by skin redness (erythema) and swelling (edema) which may progress to vesiculation, scaling and thickening of the epidermis. Histologically there may be intercellular edema of the spongy layer (spongiosis) and intracellular edema of the epidermis.
The mean rate of absorption of liquid ethyl benzene applied to 17.3 cm2 area of the forearm of seven volunteers for 10-15 minutes was determined to be 38 mg/cm2/hr. Immersion of the whole hand in aqueous solutions of ethyl benzene (112-156 mg/l) for 1 hour yielded mean absorption rates of 118 and 215.7 ug/cm2/hr. The rate of absorption is thus greater than that of aniline, benzene, nitrobenzene, carbon disulfide and styrene.
Repeated application of the undiluted product to the abdominal area of rabbits (10-20 applications over 2-4 weeks) resulted in erythema, edema and superficial necrosis. The material did not appear to be absorbed through the skin in sufficient quantity to produce outward signs of toxicity.

Ingestion: Considered an unlikely route of entry in commercial/industrial environments.
The liquid may produce considerable gastrointestinal discomfort and may be harmful or toxic if swallowed. Ingestion may result in nausea, pain and vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

Carcinogenicity: NTP - Not listed; IARC - Not listed; OSHA - Not listed; NIOSH - Not listed; ACGIH - Not listed; EPA - Class D, Not classifiable as to human carcinogenicity; MAK - Not listed.

Chronic Effects: Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes.
Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following.
Industrial workers exposed to a maximum level of ethyl benzene of 0.06 mg/l (14 ppm) reported headaches and irritability and tired quickly. Functional nervous system disturbances were found in some workers employed for over 7 years whilst other workers had enlarged livers.

Section 4 - First Aid Measures

See DOT ERG

Inhalation: Remove to fresh air.
Lay patient down. Keep warm and rested.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor.

Eye Contact: Immediately hold the eyes open and flush continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids.
Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact: Immediately remove all contaminated clothing, including footwear (after rinsing with water).
Wash affected areas thoroughly with water (and soap if available).
Seek medical attention in event of irritation.

Ingestion: Rinse mouth out with plenty of water. DO NOT induce vomiting.
Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
Give water (or milk) to rinse out mouth. Then provide liquid slowly and as much as casualty can comfortably drink.
Transport to hospital or doctor without delay.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: For acute or short-term repeated exposures to petroleum distillates or related hydrocarbons:

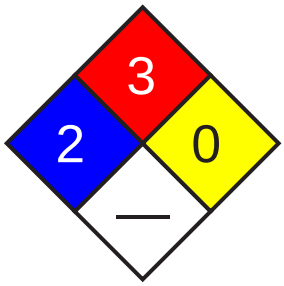
Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

1. Primary threat to life from pure petroleum distillate ingestion and/or inhalation is respiratory failure.
2.Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO_2 <50 mm Hg or pCO_2 >50 mm Hg) should be intubated.
3.Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance
4.A chest x-ray should be taken immediately after stabilization of breathing and circulation to document aspiration and detect the presence of pneumothorax.
5.Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitization to catecholamines.
Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
6.Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients.

Section 5 - Fire-Fighting Measures

Flash Point: 12.8 °C Closed Cup
Autoignition Temperature: 432 °C
LEL: 1.6% v/v
UEL: 7% v/v
Extinguishing Media: Foam, dry chemical powder, BCF (where regulations permit), carbon dioxide.
Water spray or fog - Large fires only.
General Fire Hazards/Hazardous Combustion Products: Liquid and vapor are flammable.
Moderate fire hazard when exposed to heat or flame.
Vapor forms an explosive mixture with air.
Moderate explosion hazard when exposed to heat or flame.
Vapor may travel a considerable distance to source of ignition.
Heating may cause expansion or decomposition leading to violent rupture of containers.
On combustion, may emit toxic fumes of carbon monoxide (CO).
May emit clouds of acrid smoke.

See DOT ERG



Fire Diamond

Fire Incompatibility: Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.
Fire-Fighting Instructions: Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways.
If safe, switch off electrical equipment until vapor fire hazard removed.
Use water delivered as a fine spray to control fire and cool adjacent area.
Avoid spraying water onto liquid pools.
Do not approach containers suspected to be hot.
Cool fire-exposed containers with water spray from a protected location.
If safe to do so, remove containers from path of fire.

Section 6 - Accidental Release Measures

Small Spills: Remove all ignition sources. Clean up all spills immediately.
Avoid breathing vapors and contact with skin and eyes.
Control personal contact by using protective equipment.
Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.

See DOT ERG

Large Spills: Clear area of personnel and move upwind.
Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways.
No smoking, bare lights or ignition sources. Increase ventilation.
Stop leak if safe to do so. Water spray or fog may be used to disperse/absorb vapor. Contain spill with sand, earth or vermiculite.
Use only spark-free shovels and explosion proof equipment.
Collect recoverable product into labeled containers for recycling.
Absorb remaining product with sand, earth or vermiculite.
Collect solid residues and seal in labeled drums for disposal.
Wash area and prevent runoff into drains.
If contamination of drains or waterways occurs, advise emergency services.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Avoid generating and breathing mist. Avoid all personal contact, including inhalation.
Wear protective clothing when risk of exposure occurs.
Use in a well-ventilated area. Prevent concentration in hollows and sumps.
DO NOT enter confined spaces until atmosphere has been checked.
Avoid smoking, bare lights, heat or ignition sources.
When handling, DO NOT eat, drink or smoke.
Vapor may ignite on pumping or pouring due to static electricity.
DO NOT use plastic buckets. Ground and secure metal containers when dispensing or pouring product. Use spark-free tools when handling.
Avoid contact with incompatible materials.
Keep containers securely sealed. Avoid physical damage to containers.
Always wash hands with soap and water after handling.
Work clothes should be laundered separately.
Use good occupational work practices. Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.
Recommended Storage Methods: Metal can; metal drum. Packing as recommended by manufacturer.
Check all containers are clearly labeled and free from leaks.
Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build-up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear. Use in a well-ventilated area.
General exhaust is adequate under normal operating conditions.
If risk of overexposure exists, wear NIOSH-approved respirator.
Correct fit is essential to obtain adequate protection.
Provide adequate ventilation in warehouse or closed storage areas.
Personal Protective Clothing/Equipment:
Eyes: Safety glasses with side shields; or as required, chemical goggles.
Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.
Hands/Feet: Barrier cream with polyethylene gloves or Nitrile gloves.
Protective footwear.
Respiratory Protection:
Exposure Range >100 to <800 ppm: Air Purifying, Negative Pressure, Half Mask
Exposure Range 800 to unlimited ppm: Self-contained Breathing Apparatus, Pressure Demand, Full Face
Cartridge Color: black
Other: Overalls. Eyewash unit.
Glove Selection Index:
VITON ..... Best selection
TEFLON ..... Best selection

Section 9 - Physical and Chemical Properties

Appearance/General Info: Clear highly flammable liquid; floats on water. Aromatic solvent odor. Soluble in alcohol, benzene, carbon tetrachloride and ether.

Physical State: Liquid
Odor Threshold: 8.7 to 870.0 mg/m^3
Vapor Pressure (kPa): 1.333 at 25.9 °C
Vapor Density (Air=1): 3.66
Formula Weight: 106.17
Specific Gravity (H_2O=1, at 4 °C): 0.8670 at 20 °C
Evaporation Rate: Fast

pH: Not applicable
pH (1% Solution): Not applicable.
Boiling Point: 136.2 °C (277 °F) at 760 mm Hg
Freezing/Melting Point: -95 °C (-139 °F)
Volatile Component (% Vol): 100
Water Solubility: 0.01% by weight

Section 10 - Stability and Reactivity

Stability/Polymerization/Conditions to Avoid: Hazardous polymerization will not occur.
Storage Incompatibilities: Avoid storage with oxidizers.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 11 - Toxicological Information

Toxicity

Oral (rat) LD_{50}: 3500 mg/kg
Inhalation (human) TC_{Lo}: 100 ppm/8h
Inhalation (rat) LC_{Lo}: 4000 ppm/4h
Intraperitoneal (mouse) LD_{50}: 2642 mg/kg~
Dermal (rabbit) LD_{50}: 17800 mg/kg~
Liver changes, utheral tract, effects on fertility, specific developmental abnormalities (musculoskeletal system) recorded.
NOTE: Substance has been shown to be mutagenic in various assays, or belongs to a family of chemicals producing damage or change to cellular DNA.

Irritation

Skin (rabbit): 15 mg/24h mild
Eye (rabbit): 500 mg - SEVERE

See *RTECS* DA 0700000, for additional data.

Section 12 - Ecological Information

Environmental Fate: If released to the atmosphere, it exist predominantly in the vapor phase based on its vapor pressure where it will photochemically degrade by reaction with hydroxyl radicals (half-life 0.5 to 2 days) and partially return to earth in rain. It will not be subject to direct photolysis. Releases into water will decrease in concentration by evaporation and biodegradation. The time for this decrease and the primary loss processes will depend on the season, and the turbulence and microbial populations in the particular body of water. Representative half-lives are several days to 2 weeks. Some may be adsorbed by sediment but significant bioconcentration in fish is not expected to occur based upon its octanol/water partition coefficient. It is only adsorbed moderately by soil. It will not significantly hydrolyze in water or soil.

Ecotoxicity: LC_{50} Cyprinodon variegatus (sheepshead minnow) 275 mg/l 96 hr in a static unmeasured bioassay; LC_{50} Pimephales promelas (fathead minnow) 12.1 mg/l/96 hr (confidence limit 11.5 - 12.7 mg/l), flow-through bioassay with measured concentrations, 26.1 °C, dissolved oxygen 7.0 mg/l, hardness 45.6 mg/l calcium carbonate, alkalinity 43.0 mg/l; Toxicity threshold (cell multiplication inhibition test): Pseudomonas putida (bacteria) 12 mg/l ; LC_{50} Palaemonetes pugio (grass shrimp, adult) 14,400 ug/l/24 hr in a static unmeasured bioassay; LC_{50} Palaemonetes pugio (grass shrimp, larva) 10,200 ug/l/24 hr in a static unmeasured bioassay; Toxicity threshold (cell multiplication inhibition test): Microcystis aeruginosa (algae) 33 mg/l; Scenedesmus quadricauda (green algae) > 160 mg/l

Henry's Law Constant: 8.44×10^{-3}

BCF: goldfish 1.9

Biochemical Oxygen Demand (BOD): theoretical 2.8%, 5 days

Octanol/Water Partition Coefficient: log $K_{ow} = 3.15$

Soil Sorption Partition Coefficient: $K_{oc} = 164$

Section 13 - Disposal Considerations

Disposal: Consult manufacturer for recycling options and recycle where possible.
Follow applicable federal, state, and local regulations.
Incinerate residue at an approved site.
Recycle containers where possible, or dispose of in an authorized landfill.

Section 14 - Transport Information

DOT Hazardous Materials Table Data (49 CFR 172.101):



Shipping Name and Description: Ethylbenzene
ID: UN1175
Hazard Class: 3 - Flammable and combustible liquid
Packing Group: II - Medium Danger
Symbols:
Label Codes: 3 - Flammable Liquid
Special Provisions: IB2, T4, TP1
Packaging: **Exceptions:** 150 **Non-bulk:** 202 **Bulk:** 242
Quantity Limitations: **Passenger aircraft/rail:** 5 L **Cargo aircraft only:** 60 L
Vessel Stowage: **Location:** B **Other:**

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 15 - Regulatory Information

EPA Regulations:

RCRA 40 CFR: Not listed
CERCLA 40 CFR 302.4: Listed per CWA Section 311(b)(4), per CWA Section 307(a) 1000 lb (453.5 kg)
SARA 40 CFR 372.65: Listed
SARA EHS 40 CFR 355: Not listed
TSCA: Listed

Section 16 - Other Information

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2006-06

Unleaded Petrol
AUT5000

Section 1 - Chemical Product and Company Identification 61

Material Name: Unleaded Petrol **CAS Number:** 8006-61-9
Chemical Formula: Mixture of hydrocarbons
EINECS Number: 232-349-1
ACX Number: X1003056-5
Synonyms: AUTOMOTIVE GASOLINE, LEAD-FREE; GASOLINE; MOTOR FUEL; MOTOR SPIRITS; NATURAL GASOLINE; PETROL; UNLEADED PETROL
General Use: Lead free motor fuel for internal combustion engines, 2-stroke and 4-stroke.

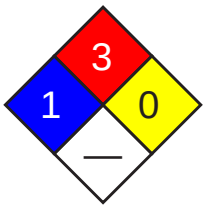
Section 2 - Composition / Information on Ingredients

Name	CAS	%
gasoline	8006-61-9	>90
benzene	71-43-2	5 max.

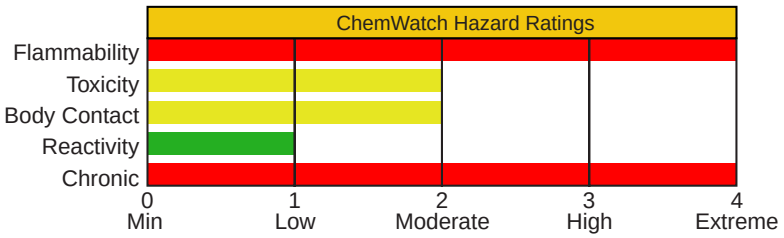
OSHA PEL **NIOSH REL**

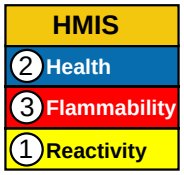
ACGIH TLV
TWA: 300 ppm, 890 mg/m^3;
STEL: 500 ppm, 1480 mg/m^3.

Section 3 - Hazards Identification



Fire Diamond





ANSI Signal Word

Danger!


Flammable

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Clear liquid; distinctive odor. Irritating to eyes/skin/respiratory tract. Other Acute Effects: dizziness, drunkenness, unconsciousness. Chronic Effects: dermatitis. Possible cancer hazard. Flammable.

Potential Health Effects

Target Organs: skin, eye, respiratory system, central nervous system (CNS)
Primary Entry Routes: inhalation, ingestion, skin contact

Copyright © 2006 by Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Acute Effects

Inhalation: The vapor is discomforting to the upper respiratory tract and may be harmful if exposure is prolonged. Inhalation hazard is increased at higher temperatures. Acute effects from inhalation of high concentrations of vapor are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterized by headache and dizziness, increased reaction time, fatigue and loss of coordination. If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death. WARNING: Intentional misuse by concentrating/inhaling contents may be lethal. High inhaled concentrations of mixed hydrocarbons may produce narcosis characterized by nausea, vomiting and lightheadedness. Inhalation of aerosols may produce severe pulmonary edema, pneumonitis and pulmonary hemorrhage. Inhalation of petroleum hydrocarbons consisting substantially of low molecular weight species may produce irritation of mucous membranes, incoordination, giddiness, nausea, vertigo, confusion, headache, appetite loss, drowziness, tremors and anesthetic stupor. Massive exposures may produce central nervous system depression with sudden collapse and deep coma; fatalities have been recorded. Irritation of the brain and/or apneic anoxia may produce convulsions. Although recovery following overexposure is generally complete, cerebral micro- hemorrhage of focal post-inflammatory scarring may produce eleptiform seizures some months after the exposure. Pulmonary episodes may include chemical pneumonitis with edema and hemorrhage. The lighter hydrocarbons may produce kidney and neurotoxic effects. Liquid paraffins may produce anesthesia and depressant actions leading to weakness, dizziness, slow and shallow respiration, unconsciousness, convulsions and death. C_{5-7} paraffins may also produce polyneuropathy. Aromatic hydrocarbons accumulate in lipid-rich tissues (typically the brain, spinal cord and peripheral nerves) and may produce functional impairment manifested by nonspecific symptoms such as nausea, weakness, fatigue, vertigo; severe exposures may produce inebriation or unconsciousness. Many of the petroleum hydrocarbons are cardiac sensitizers and may cause ventricular fibrillations.

Eye: The liquid may produce eye discomfort and is capable of causing temporary impairment of vision and/or transient eye inflammation, ulceration. The vapor is discomforting to the eyes. Petroleum hydrocarbons may produce pain after direct contact with the eyes. Slight, but transient, disturbances of the corneal epithelium may also result. The aromatic fraction may produce irritation and lachrymation. The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

Skin: The material is moderately discomforting to the skin if exposure is prolonged. The material contains a component that may be absorbed through the skin and may cause drying of the skin, which may lead to dermatitis from repeated exposures over long periods. Toxic effects may result from skin absorption. Open cuts, abraded or irritated skin should not be exposed to this material. The material may accentuate any pre-existing dermatitis condition.

Ingestion: Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce gastrointestinal discomfort and may be harmful if swallowed. Ingestion may result in nausea, pain and vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis. Ingestion of petroleum hydrocarbons may produce irritation of the pharynx, esophagus, stomach and small intestine with edema and mucosal ulceration. Resulting symptoms include a burning sensation in the mouth and throat. Large amounts may produce narcosis with nausea and vomiting, weakness or dizziness, slow and shallow respiration, swelling of the abdomen, unconsciousness and convulsions. Myocardial injury may produce arrhythmias, ventricular fibrillation and electrocardiographic changes. Central nervous system depression may also occur. Light aromatic hydrocarbons produce a warm, sharp, tingling sensation on contact with taste buds and may anesthetize the tongue. Aspiration into the lungs may produce coughing, gagging, and a chemical pneumonitis with pulmonary edema and hemorrhage.

Carcinogenicity: NTP - Not listed; IARC - Group 2B, Possibly carcinogenic to humans; OSHA - Not listed; NIOSH - Listed as carcinogen; ACGIH - Class A3, Animal carcinogen; EPA - Not listed; MAK - Not listed.

Chronic Effects: Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following. Chronic poisoning may occur from vapor inhalation or skin absorption. The most significant toxic effect is insidious and irreversible injury to the blood-forming tissue by benzene. Leukemia may develop. Chronic exposure may cause headache, fatigue, loss of appetite and lassitude with incipient blood effects including anemia and blood changes. Gasoline "sniffing" has caused severe nerve damage. Repeated or prolonged exposure to mixed hydrocarbons may produce narcosis with dizziness, weakness, irritability, concentration and/or memory loss, tremor in the fingers and tongue, vertigo, olfactory disorders, constriction of visual field, paresthesias of the extremities, weight loss and anemia and degenerative changes in the liver and kidney. Chronic exposure by petroleum workers to the lighter hydrocarbons has been associated with visual disturbances, damage to the central nervous system, peripheral neuropathies (including numbness and paresthesias), psychological and neurophysiological deficits, bone marrow toxicities (including hypoplasia, possibly due to benzene) and hepatic and renal involvement. Chronic dermal exposure to petroleum hydrocarbons may result in defatting which produces localized dermatoses. Surface cracking and erosion may also increase susceptibility to infection by microorganisms.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air. Lay patient down. Keep warm and rested.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital, or doctor.

See DOT ERG

Eye Contact: Immediately hold the eyes open and wash continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact: Immediately remove all contaminated clothing, including footwear (after rinsing with water). Wash affected areas thoroughly with water (and soap if available). Seek medical attention in event of irritation.

Ingestion: Contact a Poison Control Center. If swallowed, do NOT induce vomiting. Give a glass of water.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

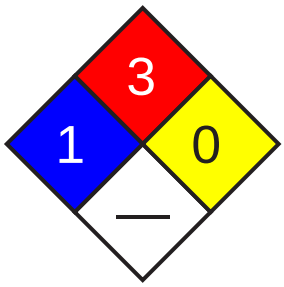
1. Primary threat to life from pure petroleum distillate ingestion and/or inhalation is respiratory failure.
2. Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO_2 <50 mm Hg or pCO_2 >50 mm Hg) should be intubated.
3. Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
4. A chest x-ray should be taken immediately after stabilization of breathing and circulation to document aspiration and detect the presence of pneumothorax.
5. Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitization to catecholamines.
Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
6. Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients.

Section 5 - Fire-Fighting Measures

Flash Point: -43 °C
Autoignition Temperature: 280 °C
LEL: 1.4% v/v
UEL: 7.6% v/v

See DOT ERG

Extinguishing Media: Foam. Dry chemical powder.
Bromochlorodifluoromethane (BCF) (where regulations permit). Carbon dioxide.



Fire Diamond

General Fire Hazards/Hazardous Combustion Products: Liquid and vapor are highly flammable. Severe fire hazard when exposed to heat, flame and/or oxidizers. Vapor forms an explosive mixture with air. Severe explosion hazard, in the form of vapor, when exposed to flame or spark. Vapor may travel a considerable distance to source of ignition. Heating may cause expansion/decomposition with violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO).

Fire Incompatibility: Avoid contamination with oxidizing agents, i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc., as ignition may result.

Fire-Fighting Instructions: Alert fire department and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water ways. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

Section 6 - Accidental Release Measures

Small Spills: Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapors and contact with skin and eyes. Control personal contact by using protective equipment. Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.

See DOT ERG

Large Spills: Clear area of personnel and move upwind. Alert fire department and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water ways. No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so.
Water spray or fog may be used to disperse/absorb vapor. Contain spill with sand, earth or vermiculite. Use only

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

spark-free shovels and explosion proof equipment. Collect recoverable product into labeled containers for recycling. Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains.
If contamination of drains or waterways occurs, advise emergency services.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Avoid generating and breathing mist. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, bare lights, heat or ignition sources. When handling, DO NOT eat, drink or smoke. Vapor may ignite on pumping or pouring due to static electricity. DO NOT use plastic buckets. Ground and secure metal containers when dispensing or pouring product. Use spark-free tools when handling. Avoid contact with incompatible materials. Keep containers securely sealed. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practices. Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

Recommended Storage Methods: Metal can, metal drum. Packing as recommended by manufacturer. Check all containers are clearly labeled and free from leaks.

Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build-up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear. Use in a well-ventilated area. If inhalation risk of overexposure exists, wear a NIOSH approved organic-vapor respirator. Correct respirator fit is essential to obtain adequate protection. In confined spaces where there is inadequate ventilation, wear full-face air supplied breathing apparatus. Provide adequate ventilation in warehouse or closed storage areas.

Personal Protective Clothing/Equipment:

Eyes: Safety glasses with side shields; or as required, chemical goggles.
Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Hands/Feet: Barrier cream with polyethylene gloves or PVC gloves. Safety footwear. Do NOT use this product to clean the skin.

Respiratory Protection:

Exposure Range >300 to 1000 ppm: Air Purifying, Negative Pressure, Half Mask
Exposure Range >1000 to 15,000 ppm: Air Purifying, Negative Pressure, Full Face
Exposure Range >15,000 to 300,000 ppm: Supplied Air, Constant Flow/Pressure Demand, Full Face
Exposure Range >300,000 to unlimited ppm: Self-contained Breathing Apparatus, Pressure Demand, Full Face
Cartridge Color: black

Other: Overalls. Ensure that there is ready access to eye wash unit. Ensure there is ready access to an emergency shower.

Section 9 - Physical and Chemical Properties

Appearance/General Info: Purple, highly flammable, volatile liquid with characteristic sharp odor. Floats on water. Consists of a complex mixture of hydrocarbons with small amounts of residual benzene from the refining operations.

Physical State: Liquid
Odor Threshold: 0.005 ppm
Vapor Pressure (kPa): 53.33 at 20 °C
Vapor Density (Air=1): > 2
Formula Weight: Not applicable.
Specific Gravity (H_2O=1, at 4 °C): 0.72-0.735 at 15 °C
Evaporation Rate: Fast
pH: Not applicable
pH (1% Solution): Not applicable.
Boiling Point: 38.89 °C (102 °F)
Freezing/Melting Point: Not available
Volatile Component (% Vol): 100
Decomposition Temperature (°C): Not available.
Water Solubility: Insoluble

Section 10 - Stability and Reactivity

Stability/Polymerization/Conditions to Avoid: Presence of incompatible materials. Product is considered stable. Hazardous polymerization will not occur.

Storage Incompatibilities: Avoid storage with oxidizers.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 11 - Toxicological Information

Toxicity
Oral (rat) LD_{50}: 18800 mg/kg

Irritation
Skin (rabbit): 500 mg/24h mild

Section 12 - Ecological Information

Environmental Fate: No data found.
Ecotoxicity: No data found.
Biochemical Oxygen Demand (BOD): 8%, 5 days

Section 13 - Disposal Considerations

Disposal: Consult manufacturer for recycling options and recycle where possible. Follow all applicable federal, state, and local laws. Incinerate residue at an approved site. Recycle containers where possible, or dispose of in an authorized landfil.
BEWARE: Empty solvent, paint, lacquer and flammable liquid drums present a severe explosion hazard if cut by flame torch or welded. Even when thoroughly cleaned or reconditioned, the drum seams may retain sufficient solvent to generate an explosive atmosphere in the drum.

Section 14 - Transport Information

DOT Hazardous Materials Table Data (49 CFR 172.101):



Shipping Name and Description: Gasoline
ID: UN1203
Hazard Class: 3 - Flammable and combustible liquid
Packing Group: II - Medium Danger
Symbols:
Label Codes: 3 - Flammable Liquid
Special Provisions: 139, B33, B101, T8
Packaging: **Exceptions:** 150 **Non-bulk:** 202 **Bulk:** 242
Quantity Limitations: **Passenger aircraft/rail:** 5 L **Cargo aircraft only:** 60 L
Vessel Stowage: **Location:** E **Other:**

Section 15 - Regulatory Information

EPA Regulations:
RCRA 40 CFR: Not listed
CERCLA 40 CFR 302.4: Not listed
SARA 40 CFR 372.65: Not listed
SARA EHS 40 CFR 355: Not listed
TSCA: Listed

Section 16 - Other Information

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2006-06

Hydrochloric Acid
HYD2200

Section 1 - Chemical Product and Company Identification 61

Material Name: Hydrochloric Acid **CAS Number:** 7647-01-0
Chemical Formula: ClH
Structural Chemical Formula: HCl
EINECS Number: 231-595-7
ACX Number: X1002202-3
Synonyms: 4-D BOWL SANITIZER; ACIDE CHLORHYDRIQUE; ACIDO CLORHIDRICO; ACIDO CLORIDRICO; ANHYDROUS HYDROCHLORIC ACID; ANHYDROUS HYDROGEN CHLORIDE; AQUEOUS HYDROGEN CHLORIDE; BOWL CLEANER; CHLOORWATERSTOF; CHLOROHYDRIC ACID; CHLOROWODOR; CHLORURE D'HYDROGENE; CHLORURE D'HYDROGENE ANHYDRE; CHLORURO DE HIDROGENO; CHLORWASSERSTOFF; CLORURO DE HIDROGENO ANHIDRO; EMULSION BOWL CLEANER; EPA PESTICIDE CHEMICAL CODE 045901; HYDROCHLORIC ACID; HYDROCHLORIC ACID GAS; HYDROCHLORIDE; HYDROGEN CHLORIDE; HYDROGEN CHLORIDE (HCL); HYGEIA CREME MAGIC BOWL CLEANER; MURIATIC ACID; MURIATIC ACID); NOW SOUTH SAFTI-SOL BRAND CONCENTRATED BOWL CLEANSE WITHMAGIC ACTIO; PERCLEEN BOWL AND URINAL CLEANER; SPIRITS OF SALT; VARLEY'S OCEAN BLUE SCENTED TOILET BOWL CLEANER; VARLEY POLY-PAK BOWL CREME; WHITE EMULSION BOWL CLEANER; WUEST BOWL CLEANER SUPER CONCENTRATED
General Use: Hydrogen chloride is used to produce pharmaceutical hydrochlorides; vinyl chloride from acetylene; alkyl chlorides from olefins and arsenious chloride from arsenious oxide; electronic grade for etching semiconductor crystals. Used in the chlorination of rubber; in organic reactions involving isomerization, polymerization and alkylation; as a catalyst and condensing agent; for making chlorine where economical; in the separation of cotton from wool and cotton de-linting; as flux in the babbitt type of metal alloy; etching semi-conductor crystals.
Hydrochloric acid is used for pickling and heavy duty cleaning of metal parts; rust and scale removal. The production of chlorides; neutralizing bases; a laboratory reagent. For hydrolyzing starch and proteins in preparations for food. As a catalyst and solvent in organic synthesis. As "spirits of salts" for cleaning of lime and masonry from new brickwork. As flux or flux component for soldering; manufacture of "killed spirits".

Section 2 - Composition / Information on Ingredients

Name	CAS	%
hydrogen chloride	7647-01-0	> 99.0

OSHA PEL
Ceiling: 5 ppm, 7 mg/m^3.

NIOSH REL
Ceiling: 5 ppm (7 mg/m^3).

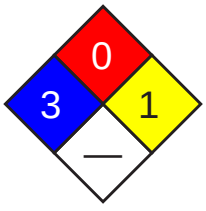
DFG (Germany) MAK
TWA: 5 ppm; PEAK: 5 ppm.

ACGIH TLV
Ceiling: 2 ppm.

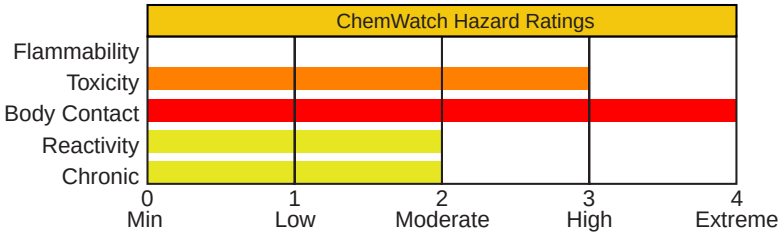
IDLH Level
50 ppm.

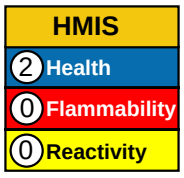
EU OEL
TWA: 5 ppm; STEL: 10 ppm.

Section 3 - Hazards Identification



Fire Diamond





ANSI Signal Word

Danger!


Corrosive Compressed Gas

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Colorless gas; characteristic suffocating, pungent odor. Corrosive. Stored as compressed gas which may cause frostbite. Chronic Effects: erosion of teeth.

Copyright © 2006 by Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Potential Health Effects

Target Organs: eyes, skin, respiratory system, liver (in animals)
Primary Entry Routes: inhalation, skin contact, eye contact
Acute Effects

Inhalation: The vapor is extremely discomforting to the upper respiratory tract, may cause severe mucous membrane damage and may be harmful if inhaled.
Inhalation of quantities of liquid mist may be extremely hazardous, even lethal due to spasm, extreme irritation of larynx and bronchi, chemical pneumonitis and pulmonary edema.
A single severe exposure may cause coughing and choking; bleeding of nose, inflammation and occasionally ulceration of the nose, throat and larynx. Fluid on the lungs followed by generalized lung damage may follow.
Breathing of vapor may aggravate asthma and inflammatory or fibrotic pulmonary disease.
High concentrations cause necrosis of the tracheal and bronchial epithelium, pulmonary edema, atelectasis and emphysema and damage to the pulmonary blood vessels and liver.
Inhalation hazard is increased at higher temperatures.
The vapor from heated material is extremely discomforting to the upper respiratory tract and lungs if inhaled.
Continued severe exposure can result in pulmonary edema and corrosion of tissues in the nose and throat.

Eye: Hydrogen Chloride: The vapor is extremely discomforting to the eyes and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.
The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
Hydrochloric Acid: Eye contact is extremely painful and may cause rapid corneal damage. The liquid is extremely corrosive to the eyes and is capable of causing severe damage with loss of sight.
The vapor is highly discomforting and may be corrosive to the eyes. The vapor from heated material is extremely discomforting to the eyes.

Skin: The material is corrosive to the skin and may cause chemical burns.
Toxic effects may result from skin absorption. Bare unprotected skin should not be exposed to this material. The material may accentuate any pre-existing skin condition.
The vapor is discomforting to the skin.

Ingestion: Considered an unlikely route of entry in commercial/industrial environments.
The liquid is extremely corrosive if swallowed and is capable of causing burns to mouth, throat, esophagus, with extreme discomfort, pain and may be fatal if swallowed in quantity. Ingestion may result in nausea, abdominal irritation, pain and vomiting.

Carcinogenicity: NTP - Not listed; IARC - Group 3, Not classifiable as to carcinogenicity to humans; OSHA - Not listed; NIOSH - Not listed; ACGIH - Not listed; EPA - Not listed; MAK - Not listed.

Chronic Effects: Chronic exposure may cause discoloration or erosion of the teeth, bleeding of the nose and gums; and ulceration of the nasal mucous membranes.
Repeated exposures of animals to concentrations of about 34 ppm produced no immediate toxic effects.
Workers exposed to hydrochloric acid suffered from gastritis and a number of cases of chronic bronchitis have also been reported.
Repeated or prolonged exposure to dilute solutions may cause dermatitis. Repeated exposure to low vapor concentrations can cause skin tenderness, bleeding of the nose and gums, chronic bronchitis, gastritis.

Section 4 - First Aid Measures



Inhalation: Remove to fresh air.
Lay patient down. Keep warm and rested.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor.

Eye Contact: Immediately hold the eyes open and flush continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids.
Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact: Immediately flush body and clothes with large amounts of water, using safety shower if available.
Quickly remove all contaminated clothing, including footwear.
Wash affected areas with water (and soap if available) for at least 15 minutes. Transport to hospital or doctor.

Ingestion: Contact a Poison Control Center. Rinse mouth out with plenty of water. Do NOT induce vomiting. Give a glass of water.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: For acute or short-term repeated exposures to strong acids:
1.Airway problems may arise from laryngeal edema and inhalation exposure.
Treat with 100% oxygen initially.
2.Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling.

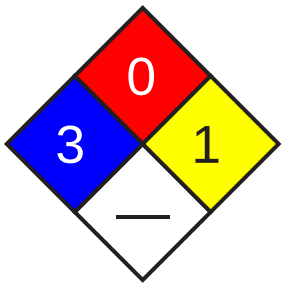
Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

3. Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise.
4.Strong acids produce a coagulation necrosis characterized by formation of a coagulum (eschar) as a result of the desiccating action of the acid on proteins in specific tissues.
INGESTION:
1.Immediate dilution (milk or water) within 30 minutes post-ingestion is recommended.
2.Do not attempt to neutralize the acid since exothermic reaction may extend the corrosive injury.
3.Be careful to avoid further vomiting since re-exposure of the mucosa to the acid is harmful. Limit fluids to one or two glasses in an adult.
4.Charcoal has no place in acid management.
5.Some authors suggest the use of lavage within 1 hour of ingestion.
SKIN:
1.Skin lesions require copious saline irrigation. Treat chemical burns as thermal burns with non-adherent gauze and wrapping.
2.Deep second-degree burns may benefit from topical silver sulfadiazine.
EYE:
1.Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjunctival cul-de-sacs. Irrigation should last at least 20-30 minutes. Do not use neutralizing agents or any other additives. Several liters of saline are required.
2.Cycloplegic drops (1% cyclopentolate for short-term use or 5% homatropine for longer term use), antibiotic drops, vasoconstrictive agents, or artificial tears may be indicated dependent on the severity of the injury.
3.Steroid eye drops should only be administered with the approval of a consulting ophthalmologist.

Section 5 - Fire-Fighting Measures

Flash Point: Nonflammable
Autoignition Temperature: Not applicable
LEL: Not applicable
UEL: Not applicable
Extinguishing Media: Water spray or fog; foam; Bromochlorodifluoromethane (BCF) (where regulations permit); Dry agent; Carbon dioxide.

See DOT ERG



Fire Diamond

General Fire Hazards/Hazardous Combustion Products: Noncombustible liquid. Will not burn, but heat produces highly toxic fumes/vapors.
Heating may cause expansion or decomposition leading to violent rupture of containers. Decomposes on heating and produces toxic fumes of hydrogen chloride. Decomposition may produce toxic fumes of chlorine.
Reacts with metals producing flammable/explosive hydrogen gas. Contact with moisture or water may generate heat causing ignition. Reacts vigorously with alkalis. Moderate fire hazard when in contact with reducing agents.
Fire Incompatibility: Reacts with metals producing flammable/explosive hydrogen gas.
Avoid reactions with metals, metal oxides, hydroxides, amines, carbonates, alkaline materials, acetic anhydride, cyanides, sulphides, sulphites, phosphides, acetylides, borides, carbides, silicides, vinyl acetate, formaldehyde and potassium permanganate, unsaturated organics, metal acetylides, sulphuric acid.
Note: Compatibility with plastics should be confirmed prior to use.
Fire-Fighting Instructions: Contact fire department and tell them location and nature of hazard.
Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation. Cool fire-exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Water spray or fog may be used to disperse vapor. Do not approach cylinders suspected to be hot. If safe to do so, stop flow of gas.

Section 6 - Accidental Release Measures

Small Spills: DO NOT touch the spill material. Clean up all spills immediately. Wear fully protective PVC clothing and breathing apparatus. Contain and absorb spill with sand, earth, inert material or vermiculite. Use soda ash or slaked lime to neutralize. Collect residues and place in labeled plastic containers with vented lids. Clear area of personnel and move upwind. Avoid breathing vapors and contact with skin and eyes. Do not exert excessive pressure on valve; do not attempt to operate damaged valve. Water spray or fog may be used to disperse vapor.

See DOT ERG

Large Spills: Contact fire department and tell them location and nature of hazard. Clear area of personnel and move upwind. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation. Stop leak if safe to do so. Remove leaking cylinders to a safe place if possible. Release pressure under safe, controlled conditions by opening the valve. Do not exert excessive pressure on valve; do not attempt to operate damaged valve. Shut off all possible sources of ignition and increase ventilation. Water spray or fog may be used to disperse vapor. Use soda ash or slaked lime to neutralize.
Collect and seal in labeled drums for disposal. Wash spill area with large quantities of water. If contamination of

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

drains or waterways occurs, advise emergency services. After clean-up operations, decontaminate and launder all protective clothing and equipment before storing and reusing. DO NOT touch the spill material. Contain and absorb spill with sand, earth, inert material or vermiculite.
DO NOT USE WATER OR NEUTRALIZING AGENTS INDISCRIMINATELY ON LARGE SPILLS.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Avoid generating and breathing mist and vapor, breathing vapors and contact with skin and eyes.
Avoid physical damage to containers. Use in a well-ventilated area. Wear protective clothing and gloves when handling containers. Handle and open container with care.
WARNING: To avoid violent reaction, ALWAYS add material to water and NEVER water to material. When handling, DO NOT eat, drink or smoke. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practices. Observe manufacturer's storing and handling recommendations.
Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
Local exhaust ventilation may be required for safe working, i.e. to keep exposures below required standards; otherwise, PPE is required.
Keep dry. Reacts violently with water.
Transport containers on a trolley. Avoid sources of heat. DO NOT transfer gas from one cylinder to another.

Recommended Storage Methods: Packaging as recommended by manufacturer. Check that containers are clearly labeled.
Cylinder. Ensure the use of equipment rated for cylinder pressure. Ensure the use of compatible materials of construction. Valve protection cap to be in place until cylinder is secured, connected. Cylinder must be properly secured either in use or in storage. Cylinder valve must be closed when not in use or when empty. Segregate full from empty cylinders. WARNING: Suckback into cylinder may result in rupture. Use back-flow preventive device in piping.
Hydrochloric acid: Packs of 2.5 litres or less require a child-resistant closure. Glass container or Plastic carboy or Polylined drum.

Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: If risk of overexposure exists, wear air supplied breathing apparatus. Provide adequate ventilation in warehouse or closed storage areas. Use in a well-ventilated area. Local exhaust ventilation may be required for safe working, i. e. , to keep exposures below required standards; otherwise, PPE is required.
If risk of inhalation or overexposure exists, wear NIOSH-approved respirator or work in fume hood. Hydrogen chloride vapors will not be adequately absorbed by organic vapor respirators.

Personal Protective Clothing/Equipment:

Eyes: Chemical goggles. Full face shield.
DO NOT wear contact lenses. Contact lenses pose a special hazard; soft contact lenses may absorb irritants and all lenses concentrate them.

Hands/Feet: Neoprene gloves; rubber gloves. Nitrile gloves.
Safety footwear. Rubber boots.
Hydrochloric acid: Barrier cream and Neoprene gloves or Elbow length PVC gloves. Nitrile gloves.
PVC boots or PVC safety gumboots.

Respiratory Protection:
Exposure Range >5 to <50 ppm: Air Purifying, Negative Pressure, Half Mask
Exposure Range 50 to unlimited ppm: Self-contained Breathing Apparatus, Pressure Demand, Full Face
Cartridge Color: white

Other: Ensure there is ready access to a safety shower; Eyewash unit.
Acid-resistant overalls. Full protective suit. Operators should be trained in procedures for safe use of this material.

Glove Selection Index:

BUTYL	Best selection
BUTYL/NEOPRENE	Best selection
HYPALON	Best selection
NEOPRENE	Best selection
NEOPRENE/NATURAL	Best selection
NITRILE+PVC	Best selection
PE/EVAL/PE	Best selection
SARANEX-23	Best selection
VITON/NEOPRENE	Best selection
PVC	Best selection

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

NITRILE ..... Best selection
NATURAL RUBBER..... Satisfactory; may degrade after 4 hours continuous immersion
NATURAL+NEOPRENE..... Satisfactory; may degrade after 4 hours continuous immersion
NAT+NEOPR+NITRILE ..... Poor to dangerous choice for other than short-term immersion

Section 9 - Physical and Chemical Properties

Appearance/General Info: Hydrogen chloride: Colorless, corrosive gas. Pungent suffocating odor. White fumes in moist air. Soluble in methanol, ethanol, ether and benzene.
Hydrochloric acid: Clear to light yellow (orange tint for inhibited grades) fuming corrosive liquid with sharp, suffocating odor.

Physical State: Hydrogen chloride: Compressed gas; Hydrochloric acid: Liquid
Odor Threshold: 0.26 to 0.3 ppm
Vapor Pressure (kPa): < 24.8 at 25 °C
Vapor Density (Air=1): 1.268 at 20 °C
Formula Weight: 36.461
Specific Gravity (H_2O=1, at 4 °C): < 1.19 at 20 °C
Evaporation Rate: Slow

pH: Hydrochloric acid: < 1
Boiling Point: -85 °C (-121 °F)
Freezing/Melting Point: -114.44 °C (-173.992 °F)
Volatile Component (% Vol): 100
Decomposition Temperature (°C): Not applicable
Water Solubility: 56.1 g/100 cc hot water at 60 °C

Section 10 - Stability and Reactivity

Stability/Polymerization/Conditions to Avoid: Decomposes in the presence of moisture to produce corrosive acid. May generate sufficient heat to ignite combustible materials. Presence of heat source and direct sunlight (ultra-violet radiation). Product is considered stable under normal handling conditions. Hazardous polymerization will not occur.
Storage Incompatibilities: Hydrogen chloride: Segregate from most common metals and their alloys, alkalis, unsaturated organics, fluorine, metal carbides, metal acetylides, potassium permanganate and sulfuric acid. Compatibility with plastics should be confirmed prior to use.
Hydrochloric acid: Segregate from alkalies, oxidizing agents and chemicals readily decomposed by acids, i.e. cyanides, sulfides, carbonates. Avoid storage with metals, metal oxides, hydroxides, amines, carbonates, alkaline materials, acetic anhydride, cyanides, sulphides, sulphites, phosphides, acetylides, borides, carbides, silicides, vinyl acetate, formaldehyde and potassium permanganate. Reacts with zinc, brass, galvanized iron, aluminum, copper and copper alloys.

Section 11 - Toxicological Information

Toxicity
Inhalation (human) LC_{Lo}: 1300 ppm/30 m
Inhalation (human) LC_{Lo}: 3000 ppm/5 m
Inhalation (rat) LC_{50}: 3124 ppm/60 m
Inhalation (rat) LC_{50}: 4701 ppm/30 m
Oral (rat) LD_{50}: 900 mg/kg

Irritation
Eye (rabbit): 5 mg/30 s - mild

See *RTECS* MW 4025000, for additional data.

Section 12 - Ecological Information

Environmental Fate: No data found.
Ecotoxicity: TL_m Gambusia affinis (mosquito fish) 282 ppm/96 hr (fresh water) /Conditions of bioassay not specified; Lethal Lepomis macrochirus (bluegill sunfish) 3.6 mg/l/48 hr /Conditions of bioassay not specified; LC_{50} Cockle 330 to 1,000 mg/l/48 hr /Conditions of bioassay not specified; LC_{50} Carassius auratus (goldfish) 178 mg/l (1 to 2 hr survival time) /Conditions of bioassay not specified; LC_{50} Shore crab 240 mg/l/48 hr /Conditions of bioassay not specified; LC_{50} Shrimp 100 to 330 ppm/48 hr (salt water) /Conditions of bioassay not specified; LC_{100} Trout 10 mg/l 24 hr /Conditions of bioassay not specified
Biochemical Oxygen Demand (BOD): none

Section 13 - Disposal Considerations

Disposal: Recycle wherever possible. Consult manufacturer for recycling options. Treat and neutralize at an effluent treatment plant. Bury residue in an authorized landfill. Decontaminate empty containers with a lime slurry. Return empty containers to supplier or bury empty containers at an authorized landfill.
Return empty cylinders to supplier.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 14 - Transport Information

DOT Hazardous Materials Table Data (49 CFR 172.101):

Note: This material has multiple possible HMT entries. Choose the appropriate one based on state and condition of specific material when shipped.

Shipping Name and Description: Hydrogen chloride, anhydrous
ID: UN1050
Hazard Class: 2.3 - Poisonous gas
Packing Group:
Symbols:
Label Codes: 2.3 - Poison Gas, 8 - Corrosive
Special Provisions: 3
Packaging: **Exceptions:** None **Non-bulk:** 304 **Bulk:** None
Quantity Limitations: **Passenger aircraft/rail:** Forbidden **Cargo aircraft only:** Forbidden
Vessel Stowage: **Location:** D **Other:** 40



Shipping Name and Description: Hydrochloric acid
ID: UN1789
Hazard Class: 8 - Corrosive material
Packing Group: II - Medium Danger
Symbols:
Label Codes: 8 - Corrosive
Special Provisions: A3, A6, B3, B15, IB2, N41, T8, TP2, TP12
Packaging: **Exceptions:** 154 **Non-bulk:** 202 **Bulk:** 242
Quantity Limitations: **Passenger aircraft/rail:** 1 L **Cargo aircraft only:** 30 L
Vessel Stowage: **Location:** C **Other:**



Shipping Name and Description: Hydrochloric acid
ID: UN1789
Hazard Class: 8 - Corrosive material
Packing Group: III - Minor Danger
Symbols:
Label Codes: 8 - Corrosive
Special Provisions: IB3, T4, TP1, TP12
Packaging: **Exceptions:** 154 **Non-bulk:** 203 **Bulk:** 241
Quantity Limitations: **Passenger aircraft/rail:** 5 L **Cargo aircraft only:** 60 L
Vessel Stowage: **Location:** C **Other:**



Section 15 - Regulatory Information

EPA Regulations:

RCRA 40 CFR: Not listed
CERCLA 40 CFR 302.4: Listed per CWA Section 311(b)(4) 5000 lb (2268 kg)
SARA 40 CFR 372.65: Listed
SARA EHS 40 CFR 355: Listed
RQ: 5000 lb
TPQ: 500 lb
TSCA: Listed

Section 16 - Other Information

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2006-06

Section 1 - Chemical Product and Company Identification 61

Material Name: Isobutene **CAS Number:** 115-11-7
Chemical Formula: C_4H_8
Structural Chemical Formula: $(CH_3)_2C=CH_2$
EINECS Number: 204-066-3
ACX Number: X1003822-9
Synonyms: Isobutene; ISOBUTYLENE; ASYM-DIMETHYLETHYLENE; GAMMA-BUTYLENE; 1,1-DIMETHYLETHYLENE; ISO-BUTENE; ISOBUTENE; ISOPROPYLIDENEMETHYLENE; LIQUEFIED PETROLEUM GAS; 2-METHYL-1-PROPENE; 2-METHYLPROPENE; 2-METHYLPROPYLENE; 1-PROPENE,2-METHYL-; PROPENE,2-METHYL-; UNSYM. DIMETHYLETHYLENE
General Use: Production of butene polymers used as adhesives, tackifiers, oil additives.
Butyl rubbers, copolymer resins with butadiene, acrylates and methacrylates.
Also to produce anti-oxidants for foods, food supplements, plastics and in production of isooctane and high-octane aviation gasoline.
Used in closed pressurized systems, fitted with safety relief valve.
Vented gas is flammable, denser than air and will spread. Vent path must not contain ignition sources, pilot lights, bare flames.

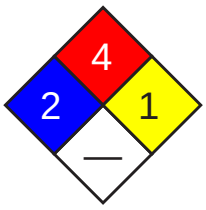
Section 2 - Composition / Information on Ingredients

Name	CAS	%
isobutene	115-11-7	>99

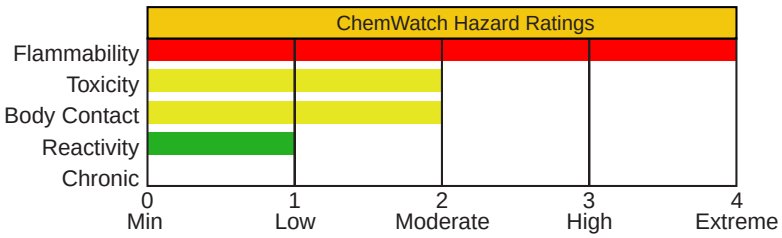
OSHA PEL **NIOSH REL**

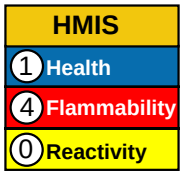
ACGIH TLV

Section 3 - Hazards Identification



Fire Diamond





ANSI Signal Word

Danger!


Flammable

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Colorless gas. Acute Effects: Simple asphyxiant which can displace available oxygen; initial symptoms: rapid respiration, air hunger, diminished mental alertness, impaired muscular coordination. Can form explosive mixtures in air. Flammable.

Potential Health Effects

Target Organs: None reported
Primary Entry Routes: inhalation
Acute Effects
Inhalation: The gas is a simple asphyxiant (precludes access to oxygen) and is harmful if exposure is prolonged and inhalation may cause loss of consciousness.

Copyright © 2006 by Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Acute effects from inhalation of high concentrations of gas / vapor are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterized by headache and dizziness, increased reaction time, fatigue and loss of coordination.
If exposure to highly concentrated atmosphere of gas is prolonged this may lead to narcosis, unconsciousness, even coma, and unless resuscitated, death.
Iso-butene is a simple asphyxiant and may have a narcotic action.
Material is highly volatile and may quickly form concentrated atmosphere in confined or unventilated area. Vapor is heavier than air and may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure.
Hydrocarbons may sensitize the heart to adrenalin and other circulatory catecholamines; as a result cardiac arrhythmias and ventricular fibrillation may occur. Abrupt collapse may produce traumatic injury.
Central nervous system (CNS) depression may be evident early. Symptoms of moderate poisoning may include giddiness, headache, dizziness and nausea.
Serious poisonings may result in respiratory depression and may be fatal.
The paraffin gases C1-4 are practically non-toxic below their lower flammability limits (18000-50000 ppm). Above this level, incidental effects include CNS depression and irritation but these are reversible upon cessation of the exposure. The C3 and iso-C5 hydrocarbons show increasing narcotic properties; branching of the chain also enhances the effect.
The C4 hydrocarbons appear to be more highly neurotoxic than the C3 and C5 members. Several fatalities due to voluntary inhalation of butane have been reported, possibly due to central, respiratory and circulatory effects resulting from anesthesia, laryngeal edema, chemical pneumonia or the combined effects of cardiac toxicity and increased sympathomimetic effects.
Inhalation of petroleum gases may produce narcosis, due in part to olefinic impurities. Displacement of oxygen in the air may cyanosis.
If present in sufficient quantity these gases may reduce the oxygen level to below 18% producing asphyxiation.
Symptoms include rapid respiration, mental dullness, lack of coordination, poor judgement, nausea and vomiting.
The onset of cyanosis may lead to unconsciousness and death.

Eye: The liquid is highly discomforting and may cause severe cold burns and is capable of causing pain and severe conjunctivitis.
Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.
The gas is regarded as non-irritating to the eyes.

Skin: Vaporizing liquid causes rapid cooling and contact may cause cold burns, frostbite.The liquid is discomforting to the skin and may rapidly cause severe cold burns.
Bare unprotected skin should not be exposed to this material.
There is no evidence of skin absorption but contact may cause frostbite,

Ingestion: Overexposure is unlikely in this form.
Considered an unlikely route of entry in commercial/industrial environments.
The liquid is highly discomforting if swallowed and may cause severe cold burns.

Carcinogenicity: NTP - Not listed; IARC - Not listed; OSHA - Not listed; NIOSH - Not listed; ACGIH - Not listed; EPA - Not listed; MAK - Not listed.

Chronic Effects: Chronic overexposure may produce dermatitis.

Section 4 - First Aid Measures

Inhalation: Avoid becoming a casualty and remove to fresh air.
Lay patient down. If breathing is shallow or has stopped, ensure clear airway and apply resuscitation.
If available, medical oxygen should be administered by trained personnel.
Transport to hospital or doctor, without delay.

See DOT ERG

Eye Contact: Immediately hold the eyes open and flush continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids.
Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact: In case of cold burns (frost-bite): Bathe the affected area immediately in cold water for 10 to 15 minutes, immersing if possible and without rubbing.
Do not apply hot water or radiant heat. Apply a clean, dry dressing.
Transport to hospital or doctor.

Ingestion: Contact a Poison Control Center. DO NOT induce vomiting. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water (or milk) to rinse out mouth. Then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital or doctor without delay.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: For acute or short-term repeated exposures to petroleum distillates or related hydrocarbons:
1.Primary threat to life from pure petroleum distillate ingestion and/or inhalation is respiratory failure.

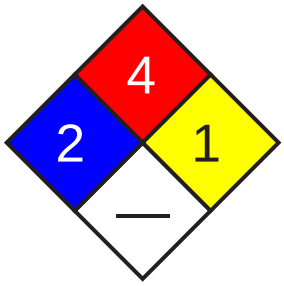
Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

2.Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO_2 <50 mm Hg or pCO_2 >50 mm Hg) should be intubated.
3.Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
4.A chest x-ray should be taken immediately after stabilization of breathing and circulation to document aspiration and detect the presence of pneumothorax.
5.Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitization to catecholamines.
Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
6.Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients.

Section 5 - Fire-Fighting Measures

Flash Point: -76.111 °C
Autoignition Temperature: 465 °C
LEL: 1.8% v/v
UEL: 9.6% v/v
Extinguishing Media: Water spray or fog; dry chemical powder.
Carbon dioxide.
Foam.

See DOT ERG



Fire Diamond

General Fire Hazards/Hazardous Combustion Products: Flammable gas. Liquid and vapor are highly flammable.
Dangerous hazard when exposed to heat, flame and oxidizers.
Gas may form explosive mixtures with air over a wide area.
Decomposes on heating and produces toxic fumes of carbon monoxide (CO) and carbon dioxide (CO_2).
Fire Incompatibility: Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.
Fire-Fighting Instructions: Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
Do not extinguish burning gas. If safe to do so, stop flow of gas.
If flow of gas cannot be stopped, leave gas to burn.
Cool fire-exposed containers with water spray from a protected location.
Do not approach cylinders suspected to be hot.
If safe to do so, remove containers from path of fire.
Fight fire from a safe distance, with adequate cover.

Section 6 - Accidental Release Measures

Small Spills: Avoid breathing vapor and any contact with liquid or gas. Protective equipment including respirator should be used. Do NOT enter confined spaces where gas may have accumulated. Shut of all sources of possible ignition and increase ventilation. Clear area of personnel. Stop leak only if safe to so do. Remove leaking cylinders to safe place. Release pressure under safe controlled conditions by opening valve. Keep area clear of personnel until gas has dispersed.

See DOT ERG

Large Spills: DO NOT touch the spill material. Shut off all possible sources of ignition and increase ventilation. Restrict access to area. Clear area of personnel and move upwind.
May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
Avoid spraying water onto liquid pools.
Use extreme caution to avoid a violent reaction.
Stop leak if safe to do so.
DO NOT enter confined places where gas may have collected. Remove leaking cylinders to a safe place. Fit vent pipes. Release pressure under safe, controlled conditions by opening valve. Burn issuing gas at vent pipes.
Do not exert excessive pressure on valve; do not attempt to operate damaged valve.
Keep area clear of personnel until gas has dispersed
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Use good occupational work practices. Use in a well-ventilated area.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Obtain a work permit before attempting any repairs.
Do not attempt repair work on lines, vessels under pressure.
Atmospheres must be tested and O.K. before work resumes after leakage.
Wear protective clothing and gloves when handling containers.
No smoking, bare lights, heat or ignition sources.
Use spark-free tools when handling. Ground all lines and equipment.
Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked.
Gas may travel a considerable distance to source of ignition.
Vapor may ignite on pumping or pouring due to static electricity.
Avoid physical damage to containers.
DO NOT transfer gas from one cylinder to another.
Natural gases contain a contaminant, radon-222, a naturally occurring radioactive gas. During subsequent processing, radon tends to concentrate in liquified petroleum streams and in product streams having similar boiling points.
Industry experience indicates that the commercial product may contain small amounts of radon-222 and its radioactive decay products (radon daughters). The actual concentration of radon-222 and radioactive daughters in process equipment (IE lines, filters, pumps and reactor units) may reach significant levels and produce potentially damaging levels of gamma radiation. A potential external radiation hazard exists at or near any pipe, valve or vessel containing a radon enriched stream or containing internal deposits of radioactive material. Field studies, however, have not shown that conditions exist that expose the worker to cumulative exposures in excess of general population limits. Equipment containing gamma-emitting decay products should be presumed to be internally contaminated with alpha- emitting decay products which may be hazardous if inhaled or ingested.
During maintenance operations that require the opening of contaminated process equipment, the flow of gas should be stopped and a four hour delay enforced to allow gamma-radiation to drop to background levels. Protective equipment (including high efficiency particulate respirators (P3) suitable for radionucleotides or supplied air) should be worn by personnel entering a vessel or working on contaminated process equipment to prevent skin contamination or inhalation of any residue containing alpha-radiation.
Airborne contamination may be minimized by handling scale and/or contaminated materials in a wet state.

Recommended Storage Methods: Packaging as recommended by manufacturer.
Check that containers are clearly labeled.
Cylinder fitted with valve protector cap.
Ensure the use of equipment rated for cylinder pressure.
Ensure the use of compatible materials of construction.
Cylinder valve must be closed when not in use or when empty.
Cylinder must be properly secured either in use or in storage.
WARNING: Suckback into cylinder may result in rupture.
Use back-flow preventive device in piping.

Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use in a well-ventilated areaIf gas concentrations are high: or If risk of overexposure exists, wear NIOSH-approved respirator.
Correct fit is essential to obtain adequate protection.
Used in closed pressurized systems; fitted with temperature and pressure safety relief valves which are vented to allow safe dispersal.
Provide adequate ventilation in warehouse or closed storage areas.

Personal Protective Clothing/Equipment:

Eyes: Safety glasses with side shields; or as required, chemical goggles.
Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Hands/Feet: Protective gloves eg. leather gloves or gloves with leather facing. Neoprene rubber gloves.
Safety footwear.

Other: Operators should be trained in correct use & maintenance of respirators Ensure that there is ready access to breathing apparatus.
Protective overalls, closely fitted at neck and wrist. Eye-wash unit.
IN CONFINED SPACES:
1. Non-sparking protective boots.
2. Static-free clothing.
3. Ensure availability of lifeline.
Staff should be trained in all aspects of rescue work.
Ensure there is ready access to an emergency shower.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 9 - Physical and Chemical Properties

Appearance/General Info: Easily liquified flammable gas or colorless highly volatile liquid. Packed as liquid under pressure and remains liquid only under pressure. Sudden release of pressure or leakage may result in rapid vaporization with generation of large volume of highly flammable / explosive gas. Strong gasoline odor. Floats and boils on water giving a flammable / explosive, visible cloud. Soluble in alcohol, ether, benzene and sulphuric acid.

Physical State: Liquefied gas
Odor Threshold: 1.3 to 3.0 mg/m^3
Vapor Pressure (kPa): 182 kPa at 10 °C
Vapor Density (Air=1): 2.01
Formula Weight: 56.11
Specific Gravity (H_2O=1, at 4 °C): 0.59
Evaporation Rate: Very rapid
pH: Not applicable
pH (1% Solution): Not applicable.
Boiling Point: -6.9 °C (20 °F)
Freezing/Melting Point: -140.35 °C (-220.63 °F)
Volatile Component (% Vol): 100
Water Solubility: Practically insoluble in water

Section 10 - Stability and Reactivity

Stability/Polymerization/Conditions to Avoid: Product is considered stable. Hazardous polymerization will not occur.
Storage Incompatibilities: Avoid contact with oxidizing agents.

The interaction of alkenes and alkynes with nitrogen oxides and oxygen may produce explosive addition products; these may form at very low temperatures and explode on heating to higher temperatures (the addition products from 1,3-butadiene and cyclopentadiene form rapidly at -150 °C and ignite or explode on warming to -35 to -15 C). These derivatives ("pseudo- nitrosites") were formerly used to characterize terpene hydrocarbons.

Exposure to air must be kept to a minimum so as to limit the build-up of peroxides which will concentrate in bottoms if the product is distilled.

The product must not be distilled to dryness if the peroxide concentration is substantially above 10 ppm (as active oxygen) since explosive decomposition may occur. Distillate must be immediately inhibited to prevent peroxide formation. The effectiveness of the antioxidant is limited once the peroxide levels exceed 10 ppm as active oxygen. Addition of more inhibitor at this point is generally ineffective.

Prior to distillation it is recommended that the product should be washed with aqueous ferrous ammonium sulfate to destroy peroxides; the washed product should be immediately re-inhibited.

A range of exothermic decomposition energies for double bonds is given as 40-90 kJ/mol. The relationship between energy of decomposition and processing hazards has been the subject of discussion; it is suggested that values of energy released per unit of mass, rather than on a molar basis (J/g) be used in the assessment. For example, in "open vessel processes" (with man-hole size openings, in an industrial setting), substances with exothermic decomposition energies below 500 J/g are unlikely to present a danger, whilst those in "closed vessel processes" (opening is a safety valve or bursting disk) present some danger where the decomposition energy exceeds 150 J/g.

Avoid reactions with oxidizing agents, organic acids, inorganic acids halogenated compounds, polymerizable esters, oxygen, cyanohydrins and molten sulphur.

Section 11 - Toxicological Information

Toxicity
Inhalation (rat) LC_{50}: 620000 mg/m^3/4h

Irritation
Nil reported

See *RTECS* UD 0890000, for additional data.

Section 12 - Ecological Information

Environmental Fate: No data found.
Ecotoxicity: No data found.
BCF: no food chain concentration potential
Biochemical Oxygen Demand (BOD): none

Section 13 - Disposal Considerations

Disposal: Consult manufacturer for recycling options.
Discharge to burning flare. Return empty cylinders to supplier.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 14 - Transport Information

DOT Hazardous Materials Table Data (49 CFR 172.101):

Note: This material has multiple possible HMT entries. Choose the appropriate one based on state and condition of specific material when shipped.

Shipping Name and Description: Isobutylene *see also* Petroleum gases, liquefied
ID: UN1055
Hazard Class: 2.1 - Flammable gas
Packing Group:
Symbols:
Label Codes: 2.1 - Flammable Gas
Special Provisions: 19, T50
Packaging: **Exceptions:** 306 **Non-bulk:** 304 **Bulk:** 314, 315
Quantity Limitations: **Passenger aircraft/rail:** Forbidden **Cargo aircraft only:** 150 kg
Vessel Stowage: **Location:** E **Other:** 40



Shipping Name and Description: Petroleum gases, liquefied *or* Liquefied petroleum gas
ID: UN1075
Hazard Class: 2.1 - Flammable gas
Packing Group:
Symbols:
Label Codes: 2.1 - Flammable Gas
Special Provisions: T50
Packaging: **Exceptions:** 306 **Non-bulk:** 304 **Bulk:** 314, 315
Quantity Limitations: **Passenger aircraft/rail:** Forbidden **Cargo aircraft only:** 150 kg
Vessel Stowage: **Location:** E **Other:**



Section 15 - Regulatory Information

EPA Regulations:

RCRA 40 CFR: Not listed
CERCLA 40 CFR 302.4: Not listed
SARA 40 CFR 372.65: Not listed
SARA EHS 40 CFR 355: Not listed
TSCA: Listed

Section 16 - Other Information

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

Isopropyl Alcohol
ISO5300

Issue Date: 2006-06

Section 1 - Chemical Product and Company Identification 61

Material Name: Isopropyl Alcohol **CAS Number:** 67-63-0
Chemical Formula: C_3H_8O
Structural Chemical Formula: $(CH_3)_2CHOH$
EINECS Number: 200-661-7
ACX Number: X1001458-1
Synonyms: ALCOJEL; ALCOOL ISOPROPILICO; ALCOOL ISOPROPYLIQUE; ALCOSOLVE; ALCOSOLVE 2; AVANTIN; AVANTINE; CHROMAR; COMBI-SCHUTZ; (COMPONENT OF) HIBISTAT; DIMETHYL CARBINOL; DIMETHYLCARBINOL; EPA PESTICIDE CHEMICAL CODE 047501; HARTOSOL; 2-HYDROXYPROPANE; IMSOL A; IPA; ISOHOL; ISOPROPANOL; ISOPROPYL ALCOHOL; ISO-PROPYLALKOHOL; LUTOSOL; 1-METHYLETHANOL; 1-METHYLETHYL ALCOHOL; PETROHOL; PRO; 2-PROPANOL; I-PROPANOL; N-PROPAN-2-OL; PROPAN-2-OL; PROPOL; 2-PROPYL ALCOHOL; I-PROPYL ALCOHOL; SEC-PROPYL ALCOHOL; I-PROPYLALKOHOL; SECONDARY PROPYL ALCOHOL; SPECTRAR; STERISOL HAND DISINFECTANT; TAKINEOCOL; VISCO 1152
Derivation: Treating propylene with sulfuric acid and then hydrolyzing or direct hydration of propylene using superheated steam. Most commonly available as rubbing alcohol (70% IPA).
General Use: As a solvent for gums, shellac, and essential oils, chemical intermediate, dehydrating agent, vehicle for germicidal compounds, de-icing agent for liquid fuels; for denaturing ethyl alcohol, preserving pathological specimens; in extraction of alkaloids, quick-drying inks and oils, and an ingredient of skin lotions, cosmetics, window cleaner, liquid soaps, and pharmaceuticals.

Section 2 - Composition / Information on Ingredients

Name	CAS	%
Isopropyl alcohol	67-63-0	100% vol.

Most commonly sold as 70% isopropyl alcohol (rubbing alcohol).

OSHA PEL
TWA: 400 ppm; 980 mg/m^3.

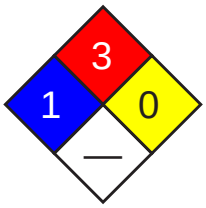
NIOSH REL
TWA: 400 ppm (980 mg/m^3); STEL: 500 ppm (1225 mg/m^3).

DFG (Germany) MAK
TWA: 200 ppm; PEAK: 400 ppm.

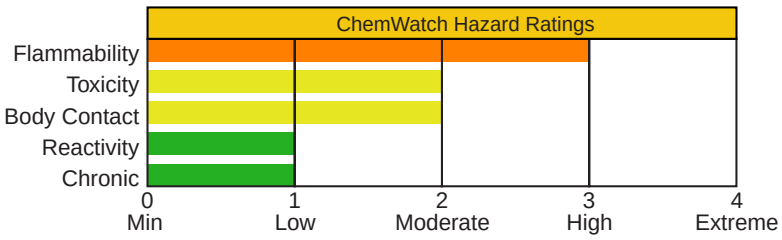
ACGIH TLV
TWA: 200 ppm; STEL: 400 ppm.

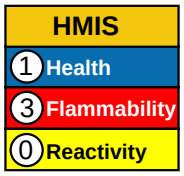
IDLH Level
2000 ppm (10% LEL).

Section 3 - Hazards Identification



Fire Diamond





ANSI Signal Word
Warning!


Flammable

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Volatile liquid. Irritating to eyes/respiratory tract. Other Acute Effects: CNS depression, possible dermatitis, systemic toxicity. Flammable

Potential Health Effects

Target Organs: Eyes, skin, respiratory system.
Primary Entry Routes: Inhalation, ingestion, skin contact/absorption.

Copyright © 2006 by Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Acute Effects

Inhalation: Vapor inhalation is irritating to the respiratory tract and can cause central nervous system depression at high concentrations. Volunteers exposed to 400 ppm for 3 to 5 min experienced mild eye and respiratory irritation. At 800 ppm, irritation was not severe, but most people found the air uncomfortable to breathe.

Eye: Exposure to the vapor or direct contact with the liquid causes irritation and possible corneal burns.

Skin: Some irritation may occur after prolonged exposure.

Ingestion: Accidental ingestions have provided the most information on isopropyl alcohol toxicity. Symptoms include nausea and vomiting, headache, facial flushing, dizziness, lowered blood pressure, mental depression, hallucinations and distorted perceptions, difficulty breathing, respiratory depression, stupor, unconsciousness, and coma. Kidney insufficiency including oliguria (reduced urine excretion), anuria (absent urine excretion), nitrogen retention, and edema (fluid build-up in tissues) may occur. One post-mortem examination in a case of heavy ingestion showed extensive hemorrhagic tracheobronchitis, broncho pneumonia, and hemorrhagic pulmonary edema. Death can occur in 24 to 36 h post-ingestion due to respiratory paralysis.

Carcinogenicity: NTP - Not listed; IARC - Group 3, Not classifiable as to carcinogenicity to humans; OSHA - Not listed; NIOSH - Not listed; ACGIH - Not listed; EPA - Not listed; MAK - Not listed.

Medical Conditions Aggravated by Long-Term Exposure: Dermatitis or respiratory or kidney disorders.

Chronic Effects: Repeated skin contact can cause drying of skin and delayed hypersensitivity reactions in some individuals.

Section 4 - First Aid Measures

See DOT ERG

Inhalation: Remove exposed person to fresh air and support breathing as needed.

Eye Contact: *Do not* allow victim to rub or keep eyes tightly shut. Gently lift eyelids and flush immediately and continuously with flooding amounts of water until transported to an emergency medical facility. Consult a physician immediately.

Skin Contact: *Quickly* remove contaminated clothing. Rinse with flooding amounts of water for at least 15 min. Wash exposed area with soap and water. For reddened or blistered skin, consult a physician.

Ingestion: Never give anything by mouth to an unconscious or convulsing person. Contact a poison control center. Unless the poison control center advises otherwise, have the *conscious and alert* person drink 1 to 2 glasses of water to dilute. Vomiting may be contraindicated because of the rapid onset of central nervous system depression. Gastric lavage is preferred.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: Diagnostic test: acetone in urine. Isopropyl alcohol is oxidized in the body to acetone where it is excreted by the lungs or kidneys. Some acetone may be further metabolized to acetate, formate, and finally carbon dioxide. Probable oral lethal dose is 240 mL.

Section 5 - Fire-Fighting Measures

See DOT ERG

Flash Point: 53 °F (12 °C), Closed Cup

Burning Rate: 2.3 mm/min.

Autoignition Temperature: 750°F (399°C)

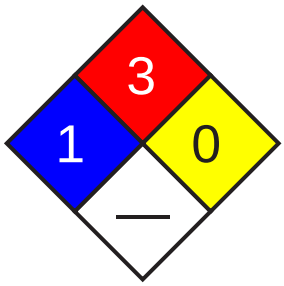
LEL: 2 % v/v

UEL: 12.7 % v/v at 200 °F

Flammability Classification: Class 1B Flammable Liquid

Extinguishing Media: Carbon dioxide, dry chemical, water *spray* (solid streams can spread fire), alcohol- resistant foam, or fog.

General Fire Hazards/Hazardous Combustion Products: Carbon oxides and acrid smoke. Container may explode in heat of fire. Vapors may travel to an ignition source and flash back. Isopropyl alcohol poses an explosion hazard indoors, outdoors, and in sewers.



Fire Diamond

Fire-Fighting Instructions: If possible without risk, move container from fire area. Apply cooling water to container side until well after fire is out. Stay away from ends of tanks. For massive fire in cargo area, use monitor nozzles or unmanned hose holders; if impossible, withdraw and let fire burn. Withdraw immediately if you hear a rising sound from venting safety device or notice any tank discoloration due to fire. *Do not* release runoff from fire control methods to sewers or waterways. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode. Structural firefighters' protective clothing provides only limited protection.

Section 6 - Accidental Release Measures

See DOT ERG

Spill/Leak Procedures: Notify safety personnel, isolate and ventilate area, deny entry, and stay upwind. Shut off ignition sources. Cleanup personnel should protect against vapor inhalation and skin/eye contact. Water spray may reduce vapor, but may not prevent ignition in closed spaces.

Small Spills: Take up with earth, sand, vermiculite, or other absorbent, noncombustible material and place in suitable containers.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Large Spills: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Use non-sparking tools to open containers.
Never eat, drink, or smoke in work areas. Practice good personal hygiene after using isopropyl alcohol, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Recommended Storage Methods: Store in a cool, dry, well-ventilated area away from heat, ignition sources, and incompatibles (Sec 10). Install electrical equipment of Class 1, Group D.

Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: To prevent static sparks, electrically ground and bond all equipment used with and around IPA. Provide general or local exhaust ventilation systems to maintain airborne levels below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred since it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls: Consider preplacement and periodic medical exams of exposed workers with emphasis on the skin, kidneys, and respiratory system. Be extra cautious when using IPA concurrently with carbon tetrachloride because animal studies have shown it enhances carbon tetrachloride's toxicity.

Personal Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Nitrile rubber (breakthrough time > 8 hr), Neoprene and Teflon (breakthrough time > 4 hr) are suitable materials for PPE. Do not use PVA, PVC or natural rubber (breakthrough time < 1 hr). Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Because contact lens use in industry is controversial, establish your own policy.

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. For < 1000 ppm, use any powered, air purifying respirator with organic vapor cartridges or any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s). For < 10,000 ppm, use any supplied-air respirator (SAR) operated in continuous-flow mode. For < 12,000 ppm, use any air- purifying, full facepiece respirator (gas mask) with a chin-style, front-or back-mounted organic vapor canister or any SCBA or SAR with a full facepiece. For emergency or entrance into unknown concentrations, use any SCBA or SAR (with auxiliary SCBA) with a full facepiece and operated in pressure-demand or other positive-pressure mode. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Other: Separate contaminated work clothes from street clothes. Launder before reuse. Remove isopropyl alcohol from your shoes and clean personal protective equipment. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Section 9 - Physical and Chemical Properties

Appearance/General Info: Colorless with a slight odor and bitter taste.

Physical State: Liquid
Odor Threshold: 7.84 to 490 mg/m^3
Vapor Pressure (kPa): 44 mm Hg at 25 °F (77 °C)
Formula Weight: 60.09
Density: 0.78505 at 68°F (20 °C)
Refractive Index: 1.375 at 68 °F (20 °C)
Boiling Point: 180.5 °F (82.5 °C)
Freezing/Melting Point: -129.1 °F (-89.5 °C)
Viscosity: 2.1 cP at 77 °F (25 °C)
Surface Tension: 20.8 dyne/cm at 77 °F (25 °C)
Ionization Potential (eV): 10.10 eV
Critical Temperature: 455 °F (235 °C)
Critical Pressure: 47 atm
Water Solubility: > 10 %
Other Solubilities: Soluble in alcohol, ether, chloroform, and benzene. Insoluble in salt solutions.

Section 10 - Stability and Reactivity

Stability/Polymerization/Conditions to Avoid: Isopropyl alcohol is stable at room temperature in closed containers under normal storage and handling conditions. Hazardous polymerization does not occur. Exposure to heat, ignition sources, and incompatibles.

Storage Incompatibilities: Include acetaldehyde, chlorine, ethylene oxide, acids and isocyanates, hydrogen + palladium, nitroform, oleum, phosgene, potassium *t*-butoxide, oxygen (forms unstable peroxides), trinitromethane, barium perchlorate, tetrafluoroborate, chromium trioxide, sodium dichromate + sulfuric acid, aluminum, aluminum triisopropoxide, and oxidizers. Will attack some forms of plastic, rubber, and coatings.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Hazardous Decomposition Products: Thermal oxidative decomposition of isopropyl alcohol can produce carbon oxides and acrid smoke.

Section 11 - Toxicological Information

Acute Oral Effects:

Rat, oral, LD_{50}: 5045 mg/kg caused a change in righting reflex, and somnolence (general depressed activity).

Human, oral, TD_{Lo}: 223 mg/kg caused hallucinations, distorted perceptions, lowered blood pressure, and a change in pulse rate.

Human, oral, LD_{Lo}: 3570 mg/kg caused coma, respiratory depression, nausea, and vomiting.

Irritation Effects:

Rabbit, eye: 100 mg caused severe irritation.

Rabbit, skin: 500 mg caused mild irritation.

Other Effects:

Rat, inhalation: 3500 ppm/7 hr given from 1 to 19 days of pregnancy caused fetotoxicity.

See *RTECS* NT8050000, for additional data.

Section 12 - Ecological Information

Environmental Fate: On soil, IPA will volatilize or leach into groundwater. Biodegradation is possible but rates are not found in available literature. It will volatilize (est. half-life = 5.4 days) or biodegrade in water. It is not expected to bioconcentrate in fish. In the air, it reacts with photochemically produced hydroxyl radicals with a half-life of one to several days. Because it is soluble, removal by rain, snow or other precipitation is possible.

Ecotoxicity: Guppies (*Poecilia reticulata*) LC_{50} = 7,060 ppm/7 days; fathead minnow (*Pimephales promelas*) LC_{50} = 11,830 mg/L/1 hr. BOD = 133 %/5 days.

Octanol/Water Partition Coefficient: log K_{ow} = 0.05

Section 13 - Disposal Considerations

Disposal: Microbial degradation is possible by oxidizing isopropyl alcohol to acetone by members of the genus *Desulfovibrio*. Spray waste into incinerator (permit-approved facilities only) equipped with an afterburner and scrubber. Isopropyl alcohol can be settled out of water spills by salting with sodium chloride. Note: Salt may harm aquatic life, so weigh the benefits against possible harm before application. Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations. Triple rinse containers.

Section 14 - Transport Information

DOT Hazardous Materials Table Data (49 CFR 172.101):



Shipping Name and Description: Isopropanol *or* Isopropyl alcohol
ID: UN1219
Hazard Class: 3 - Flammable and combustible liquid
Packing Group: II - Medium Danger
Symbols:
Label Codes: 3 - Flammable Liquid
Special Provisions: IB2, T4, TP1
Packaging: **Exceptions:** 150 **Non-bulk:** 202 **Bulk:** 242
Quantity Limitations: **Passenger aircraft/rail:** 5 L **Cargo aircraft only:** 60 L
Vessel Stowage: **Location:** B **Other:**

Section 15 - Regulatory Information

EPA Regulations:

RCRA 40 CFR: Not listed
CERCLA 40 CFR 302.4: Not listed
SARA 40 CFR 372.65: Listed
SARA EHS 40 CFR 355: Not listed
TSCA: Listed

Section 16 - Other Information

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2006-06

Methyl tert-Butyl Ether
BUT5410

Section 1 - Chemical Product and Company Identification 61

Material Name: Methyl tert-Butyl Ether **CAS Number:** 1634-04-4
Chemical Formula: $C_5H_{12}O$
Structural Chemical Formula: $(CH_3)_3COCH_3(CH_3)_3COCH_3$
EINECS Number: 216-653-1
ACX Number: X1001502-4
Synonyms: T-BUTYL METHYL ETHER; TERT-BUTYL METHYL ETHER; ETHER,TERT-BUTYL METHYL; 2-METHOXY-2-METHYL PROPANE; 2-METHOXY-2-METHYLPROPANE; METHYL TERT-BUTYL ETHER; METHYL 1,1-DIMETHYLETHYL ETHER; METHYL-TERT-BUTYL ETHER; METHYL TERTIARY BUTYL ETHER; 2-METHYL-2-METHOXYPROPANE; MTBE; PROPANE,2-METHOXY-2-METHYL-; PROPANE,2-METHOXY-2-METHYL-(9CI)
General Use: Octane booster for unleaded petrol (up to 7% by volume), manufacture of isobutene; solvent for a number of applications, including pesticide analysis.

Section 2 - Composition / Information on Ingredients

Name	CAS	%
methyl tert-butyl ether	1634-04-4	>95
commercial material may contain C_5 hydrocarbons <5%		

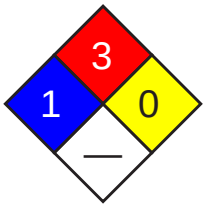
OSHA PEL

NIOSH REL

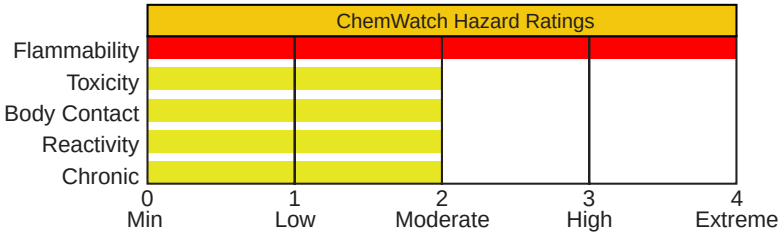
DFG (Germany) MAK
TWA: 50 ppm; PEAK: 75 ppm.

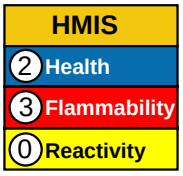
ACGIH TLV
TWA: 50 ppm.

Section 3 - Hazards Identification



Fire Diamond





ANSI Signal Word

Danger!


Flammable

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Clear, colorless liquid; slight hydrocarbon/mint or terpene-like odor. Irritating to eyes/skin/respiratory tract. Other Acute Effects: CNS and respiratory depression, aspiration pneumonitis. Chronic Effects: nasal/tracheal inflammation. Flammable.

Potential Health Effects

Target Organs: upper respiratory system, central nervous system (CNS)
Primary Entry Routes: inhalation, ingestion
Acute Effects

Inhalation: The vapor is harmful and discomforting to the upper respiratory tract. Acute effects from inhalation of high vapor concentrations may be chest and nasal irritation with coughing, sneezing, headache and even nausea. If exposure to highly concentrated vapor atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma, and unless resuscitated, death. Inhalation of the lower alkyl ethers may produce intoxication, blurred vision, headache, dizziness, excitation, pharyngitis, and irritation of the nose and throat. Convulsions, respiratory distress or paralysis, asphyxia, pneumonitis, and unconsciousness are all serious manifestations of poisoning; liver and kidney damage may occur. Fatalities have been reported. Ethers produce narcosis following inhalation.

Copyright © 2006 by Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Rats exposed to 8000 ppm for 6 hours showed changes in motor activity with the pattern and time course of effects being indicative of transient central nervous system depression. Transient increases in motor activity, on the other hand, were observed in male rats exposed at 800 and 4000 ppm. This finding may reflect an exposure-related stimulant effect or an exaggerated response following recovery from an anesthetic effect. Rats exposed to 1000 ppm, 6 hours/day, 5 days/week for 9 exposures showed lachrymation, conjunctival swelling and corneal changes. A reduced reaction to auditory stimuli was noted at 3000 ppm. There were no other macroscopic pathology findings other than chronic inflammatory changes in the nasal mucosa and trachea.

Eye: The liquid is extremely discomforting to the eyes.
Eye contact with alkyl ethers (vapors or liquid) may produce irritation, redness and lachrymation.

Skin: The liquid is discomforting to the skin and is capable of causing skin reactions which may lead to dermatitis. Bare unprotected skin should not be exposed to this material. Considered to be harmful if it is absorbed by the skin. Alkyl ethers may defat and dehydrate the skin producing dermatoses.
Absorption may produce headache, dizziness, and central nervous system depression.

Ingestion: Considered an unlikely route of entry in commercial/industrial environments. The liquid is extremely discomforting and may be fatal if swallowed. Ingestion may result in nausea, pain, vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis. Ingestion of alkyl ethers may produce symptoms to those produced following inhalation.

Carcinogenicity: NTP - Not listed; IARC - Group 2B, Possibly carcinogenic to humans; OSHA - Not listed; NIOSH - Not listed; ACGIH - Class A3, Animal carcinogen; EPA - Not listed; MAK - Not listed.

Chronic Effects: Prolonged or repeated exposure may cause kidney damage.
Rats exposed to 800, 4000 or 8000 ppm, 6 hours/day, 5 days/week, for 13 weeks showed statistically significant increases in the mean absolute and relative weights of liver, kidneys, and adrenal gland in the two higher exposure groups, while mild hematological changes were seen in all animals.
Chronic exposure to alkyl ethers may result in loss of appetite, excessive thirst, fatigue, and weight loss.

Section 4 - First Aid Measures

See DOT ERG

Inhalation: Remove to fresh air. Lay patient down. Keep warm and rested. If available, administer medical oxygen by trained personnel. If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor without delay.

Eye Contact: Immediately hold the eyes open and wash continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact: Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash affected areas with water (and soap if available) for at least 15 minutes. Transport to hospital or doctor.

Ingestion: DO NOT induce vomiting.
Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water (or milk) to rinse out mouth. Then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital or doctor without delay.

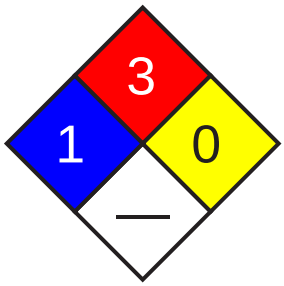
After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: Treat symptomatically.

Section 5 - Fire-Fighting Measures

See DOT ERG

Flash Point: -26 °C Closed Cup
Autoignition Temperature: 435 °C
LEL: 1.5% v/v
Extinguishing Media: Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide.
Water spray or fog - Large fires only.



Fire Diamond

General Fire Hazards/Hazardous Combustion Products: Liquid and vapor are highly flammable. Severe fire hazard when exposed to heat, flame and/or oxidizers. Vapor forms an explosive mixture with air.
Severe explosion hazard, in the form of vapor, when exposed to flame or spark. Vapor may travel a considerable distance to source of ignition.
Heating may cause expansion/decomposition with violent rupture of containers.
On combustion, may emit toxic fumes of carbon monoxide (CO). May emit poisonous fumes.

Fire Incompatibility: Avoid contact with oxidizing agents and strong acids.

Fire-Fighting Instructions: Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
Fight fire from a safe distance, with adequate cover.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

If safe, switch off electrical equipment until vapor fire hazard removed.
Use water delivered as a fine spray to control the fire and cool adjacent area. Avoid spraying water onto liquid pools.
Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protective location. If safe to do so, remove containers from path of fire.

Section 6 - Accidental Release Measures



Small Spills: Remove all ignition sources. Clean up all spills immediately.
Avoid breathing vapors and contact with skin and eyes.
Control personal contact by using protective equipment.
Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.
Large Spills: Clear area of personnel and move upwind.
Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
No smoking, bare lights or ignition sources. Increase ventilation.
Stop leak if safe to do so. Water spray or fog may be used to disperse/absorb vapor. Contain spill with sand, earth or vermiculite.
Use only spark-free shovels and explosion proof equipment.
Collect recoverable product into labeled containers for recycling.
Absorb remaining product with sand, earth or vermiculite.
Collect solid residues and seal in labeled drums for disposal.
Wash area and prevent runoff into drains.
If contamination of drains or waterways occurs, advise emergency services.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Do not allow clothing wet with material to stay in contact with skin.
Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.
DO NOT enter confined spaces until atmosphere has been checked.
Avoid smoking, bare lights, heat or ignition sources. When handling, DO NOT eat, drink or smoke.
Vapor may ignite on pumping or pouring due to static electricity.
Ground and secure containers when dispensing or pouring product. Use spark-free tools when handling.
Avoid contact with incompatible materials.
Keep containers securely sealed. Avoid physical damage to containers.
Always wash hands with soap and water after handling. Work clothes should be laundered separately.
Use good occupational work practice. Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.
Recommended Storage Methods: Metal can; Metal drum; Metal safety cans. Packing as supplied by manufacturer.
Plastic containers may only be used if approved for flammable liquid.
Check that containers are clearly labeled and free from leaks.
Storage Requirements: Store below 38 deg. C.
Rotate all stock to prevent aging. Use on FIFO (First In-First Out) basis.
Store in original containers in approved flame-proof area.
No smoking, bare lights, heat or ignition sources.
DO NOT store in pits, depressions, basements or areas where vapors may be trapped. Keep containers securely sealed.
Store away from incompatible materials in a cool, dry well ventilated area.
Protect containers against physical damage and check regularly for leaks.
Observe manufacturer's storing and handling recommendations.
Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use in a well-ventilated area.
General exhaust is adequate under normal operating conditions.
Local exhaust ventilation may be required in specific circumstances.
If risk of overexposure exists, wear NIOSH approved respirator.
Correct fit is essential to obtain adequate protection.
Provide adequate ventilation in warehouse or closed storage areas.
Ground and secure containers when dispensing or pouring.
Avoid generation of static electricity. Ground all lines and equipment.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Vapor may ignite on pumping or pouring due to static electricity. Ground and secure containers when dispensing or pouring product.

Personal Protective Clothing/Equipment:

Eyes: Safety glasses. Safety glasses with side shields. Chemical goggles.
Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Hands/Feet: Nitrile gloves Safety footwear.

Respiratory Protection:

Exposure Range >40 to 2000 ppm: Supplied Air, Constant Flow/Pressure Demand, Half Mask
Exposure Range >2000 to 40,000 ppm: Supplied Air, Constant Flow/Pressure Demand, Full Face
Exposure Range >40,000 to unlimited ppm: Self-contained Breathing Apparatus, Pressure Demand, Full Face
Note: odor threshold unknown

Other: Eyewash unit. Ensure there is ready access to a safety shower.
Impervious apron.

Section 9 - Physical and Chemical Properties

Appearance/General Info: Colorless, highly volatile, highly flammable liquid; ethereal odor.

Physical State: Liquid
Vapor Pressure (kPa): 27.5 at 20 °C
Vapor Density (Air=1): 3.1
Formula Weight: 88.15
Specific Gravity (H_2O=1, at 4 °C): 0.74
Evaporation Rate: Fast
pH: Not applicable

pH (1% Solution): Not applicable
Boiling Point: 55.2 °C (131 °F)
Freezing/Melting Point: -109 °C (-164.2 °F)
Volatile Component (% Vol): 100
Water Solubility: Solubility of water in methyl-tbutyl ether 2 g/100 g

Section 10 - Stability and Reactivity

Stability/Polymerization/Conditions to Avoid: WARNING: Long standing in contact with air and light may result in the formation of potentially explosive peroxides.
Product is considered stable. Hazardous polymerization will not occur.

Storage Incompatibilities: May form explosive peroxides on standing or following concentration by distillation. Review of stocks and testing for peroxide content by given tested procedures at 3-monthly intervals is recommended, together with safe disposal of peroxidic samples.
[Peroxide containing residues can often be rendered innocuous by pouring into an excess of sodium carbonate solution] Avoid storage with oxidizers and strong acids.

Section 11 - Toxicological Information

Toxicity
Oral (rat) LD_{50}: 4000 mg/kg
Inhalation (rat) LC_{50}: 23576 ppm/4 H

Irritation
Nil reported

See *RTECS* KN5250000, for additional data.

Section 12 - Ecological Information

Environmental Fate: If released to soil, it will be subject to volatilization. It will be expected to exhibit very high mobility in soil and, therefore, it may leach to groundwater. It will not be expected to hydrolyze in soil. If released to water, it will not be expected to significantly adsorb to sediment or suspended particulate matter, bioconcentrate in aquatic organisms, hydrolyze, directly photolyze, or photooxidize via reaction with photochemically produced hydroxyl radicals in the water, based upon estimated physical-chemical properties or analogies to other structurally related aliphatic ethers. In surface water it will be subject to rapid volatilization with estimated half-lives of 4.1 hr and 2.0 days for volatilization from a river one meter deep flowing 1 m/sec with a wind velocity of 3 m/sec and a model pond, respectively. It may be resistant to biodegradation in environmental media based upon screening test data from a study using activated sludge inocula. Many ethers are known to be resistant to biodegradation. If released to the atmosphere, it will be expected to exist almost entirely in the vapor phase based on its vapor pressure. It will be susceptible to photooxidation via vapor phase reaction with photochemically produced hydroxyl radicals with an estimated half-life of 5.6 days for this process. Direct photolysis will not be an important removal process since aliphatic ethers do not adsorb light at wavelengths >290 nm.

Ecotoxicity: No data found.
Henry's Law Constant: 5.87×10^{-4}
BCF: carp 1.5
Soil Sorption Partition Coefficient: K_{OC} = estimated at 11.2

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 13 - Disposal Considerations

Disposal: Consult manufacturer for recycling options and recycle where possible. Follow applicable federal, state, and local regulations. Incinerate residue at an approved site. Recycle containers where possible, or dispose of in an authorized landfill.
BEWARE: Empty solvent, paint, lacquer and flammable liquid drums present a severe explosion hazard if cut by flame torch or welded. Even when thoroughly cleaned or reconditioned the drum seams may retain sufficient solvent to generate an explosive atmosphere in the drum.

Section 14 - Transport Information

DOT Hazardous Materials Table Data (49 CFR 172.101):



Shipping Name and Description: Methyl tert-butyl ether
ID: UN2398
Hazard Class: 3 - Flammable and combustible liquid
Packing Group: II - Medium Danger
Symbols:
Label Codes: 3 - Flammable Liquid
Special Provisions: IB2, T7, TP1
Packaging: **Exceptions:** 150 **Non-bulk:** 202 **Bulk:** 242
Quantity Limitations: **Passenger aircraft/rail:** 5 L **Cargo aircraft only:** 60 L
Vessel Stowage: **Location:** E **Other:**

Section 15 - Regulatory Information

EPA Regulations:
RCRA 40 CFR: Not listed
CERCLA 40 CFR 302.4: Listed per CAA Section 112 1000 lb (453.5 kg)
SARA 40 CFR 372.65: Listed
SARA EHS 40 CFR 355: Not listed
TSCA: Listed

Section 16 - Other Information

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Material Safety Data Sheet Collection
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2006-06

Section 1 - Chemical Product and Company Identification 61

Material Name: Nitric Acid **CAS Number:** 7697-37-2
Chemical Formula: HNO_3
Structural Chemical Formula: HNO_3
EINECS Number: 231-714-2
ACX Number: X1002177-5
Synonyms: ACIDE NITRIQUE; ACIDO NITRICO; AQUA FORTIS; AZOTIC ACID; AZOTOWY KWAS; ENGRAVER'S ACID; ENGRAVERS ACID; HYDROGEN NITRATE; KYSELINA DUSICNE; NITAL; NITRIC ACID; NITRIC ACID OTHER THAN RED FUMING WITH >70% NITRIC ACID; NITRIC ACID OTHER THAN RED FUMING WITH NOT >70% NITRICACID; NITROUS FUMES; NITRYL HYDROXIDE; RED FUMING NITRIC ACID (RFNA); SALPETERSAURE; SALPETERZUUROPLOSSINGEN; WHITE FUMING NITRIC ACID (WFNA)
General Use: Manufacture of organic and inorganic nitrates and nitro compounds for fertilizers, dye intermediates and many organic chemicals.
Used for etching and cleaning metals.
Operators should be trained in procedures for safe use of this material.

Section 2 - Composition / Information on Ingredients

Name	CAS	%
nitric acid	7697-37-2	>95

OSHA PEL
TWA: 2 ppm; 5 mg/m^3.

ACGIH TLV
TWA: 2 ppm; STEL: 4 ppm.

EU OEL
STEL: 2.6 mg/m^3 (1 ppm).

NIOSH REL
TWA: 2 ppm (5 mg/m^3); STEL: 4 ppm (10 mg/m^3).

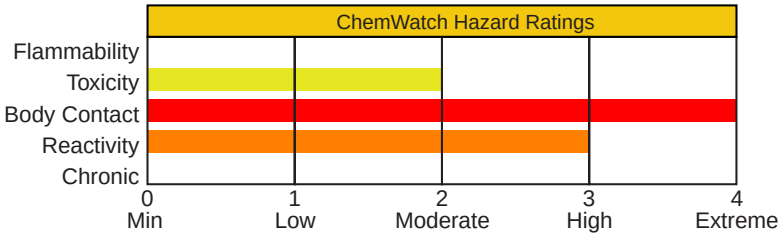
IDLH Level
25 ppm.

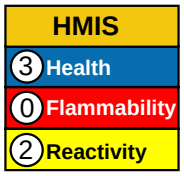
DFG (Germany) MAK
TWA: 2 ppm; PEAK: 2 ppm.

Section 3 - Hazards Identification



Fire Diamond





ANSI Signal Word

Danger!


Corrosive

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Clear to yellow fuming liquid; acrid, suffocating odor. Corrosive. Other Acute Effects: lung damage. Chronic Effects: tooth erosion, bronchitis. Strong oxidizer.

Potential Health Effects

Target Organs: eyes, skin, respiratory system, teeth
Primary Entry Routes: inhalation, ingestion, skin contact, eye contact
Acute Effects
Inhalation: The vapor is extremely discomforting and corrosive to the upper respiratory tract and lungs and the material presents a hazard from a single acute exposure or from repeated exposures over long periods.
Inhalation hazard is increased at higher temperatures.
Reactions may occur following a single acute exposure or may only appear after repeated exposures.

Copyright © 2006 by Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited. Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Reactions may not occur on exposure but response may be delayed with symptoms only appearing many hours later.
The material may produce respiratory tract irritation which produces an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system. Unlike most organs the lung can respond to a chemical insult or agent by first trying to remove or neutralize the irritant and then repairing the damage. The repair process, which initially developed to protect mammalian lungs from foreign matter and antigens, may however, cause further damage the lungs when activated by hazardous chemicals. The result is often the impairment of gas exchange, the primary function of the lungs.
Inhalation of nitric acid mist or fumes at 2 to 25 ppm over an 8 hour period may cause pulmonary irritation and symptoms of lung damage.
Only several minutes of exposure to concentrated atmosphere i.e. 200 ppm may cause severe pulmonary damage and even fatality. Death may be delayed for several days.
Exposure to nitric acid fumes (with concurrent inhalation of nitrogen dioxide and nitric oxide) may elicit prompt irritation of the upper respiratory tract leading to coughing, gagging, chest pain, dyspnea, cyanosis if concentrations are sufficiently high and duration of exposure sufficiently long, pulmonary edema.

Eye: The liquid is extremely corrosive to the eyes and contact may cause rapid tissue destruction and is capable of causing severe damage with loss of sight.
The vapor is extremely discomforting to the eyes and is capable of causing pain and severe conjunctivitis.
Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.
The material may produce moderate eye irritation leading to inflammation.
Repeated or prolonged exposure to irritants may produce conjunctivitis.
Eye contact with concentrated acid may give no pain, whilst diluted solution causes intense pain and both can cause permanent eye damage or blindness. Burns may result in shrinkage of the eyeball, symblepharon (adhesions between tarsal and bulbar conjunctivae), permanent corneal opacification, and visual impairment leading to blindness.

Skin: The liquid is extremely corrosive to the skin and contact may cause tissue destruction with severe burns.
Bare unprotected skin should not be exposed to this material.
The vapor is highly discomforting to the skin.
The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterized by skin redness (erythema) and swelling (edema) which may progress to vesiculation, scaling and thickening of the epidermis. Histologically there may be intercellular edema of the spongy layer (spongiosis) and intracellular edema of the epidermis.
Skin contact causes yellow discoloration of the skin, blisters and scars that may not heal. The skin may be stained bright-yellow or yellowish brown due to the formation of xanthoproteic acid. Dilute solutions may harden the epithelium without producing overt corrosion.

Ingestion: Considered an unlikely route of entry in commercial/industrial environments.
The material is extremely corrosive if swallowed and is capable of causing burns to mouth, throat, esophagus, with extreme discomfort, pain and may be fatal.
Even a small amount causes severe corrosion of the stomach, burning pain, vomiting and shock, possibly causing non-healing scarring of the gastrointestinal tract and stomach. Death may be delayed 12 hours to 14 days or to several months. Such late fatalities are attributed to a chemical lobular pneumonitis secondary to aspiration. Survivors show stricture of the gastric mucosa and subsequent pernicious anemia.

Carcinogenicity: NTP - Not listed; IARC - Not listed; OSHA - Not listed; NIOSH - Not listed; ACGIH - Not listed; EPA - Not listed; MAK - Not listed.

Chronic Effects: Prolonged or repeated overexposure to low concentrations of vapor may cause chronic bronchitis, corrosion of teeth, even chemical pneumonitis.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air.
Lay patient down. Keep warm and rested.
If available, administer medical oxygen by trained personnel.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor, without delay.



Eye Contact: Immediately hold the eyes open and flush continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids.
Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Immediately transport to hospital or doctor. DO NOT delay.

Skin Contact: Immediately flush body and clothes with large amounts of water, using safety shower if available.
Quickly remove all contaminated clothing, including footwear.
Wash affected areas with water (and soap if available) for at least 15 minutes. Transport to hospital or doctor. DO NOT delay.

Ingestion: Contact a Poison Control Center.
Do NOT induce vomiting. Give a glass of water.
Immediately transport to hospital or doctor. DO NOT delay.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: For acute or short-term repeated exposures to strong acids:

1.Airway problems may arise from laryngeal edema and inhalation exposure.
Treat with 100% oxygen initially.
2.Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling.
3. Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise.
4.Strong acids produce a coagulation necrosis characterized by formation of a coagulum (eschar) as a result of the desiccating action of the acid on proteins in specific tissues.

INGESTION:

1.Immediate dilution (milk or water) within 30 minutes post-ingestion is recommended.
2.Do not attempt to neutralize the acid since exothermic reaction may extend the corrosive injury.
3.Be careful to avoid further vomiting since re-exposure of the mucosa to the acid is harmful. Limit fluids to one or two glasses in an adult.
4.Charcoal has no place in acid management.
5.Some authors suggest the use of lavage within 1 hour of ingestion.

SKIN:

1.Skin lesions require copious saline irrigation. Treat chemical burns as thermal burns with non-adherent gauze and wrapping.
2.Deep second-degree burns may benefit from topical silver sulfadiazine.

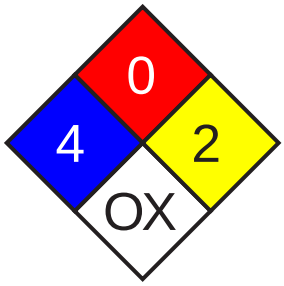
EYE:

1.Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjunctival cul-de-sacs. Irrigation should last at least 20-30 minutes. Do not use neutralizing agents or any other additives. Several liters of saline are required.
2.Cycloplegic drops (1% cyclopentolate for short-term use or 5% homatropine for longer term use), antibiotic drops, vasoconstrictive agents, or artificial tears may be indicated dependent on the severity of the injury.
3.Steroid eye drops should only be administered with the approval of a consulting ophthalmologist.

Section 5 - Fire-Fighting Measures

Flash Point: Nonflammable
Autoignition Temperature: Not applicable
LEL: Not applicable
UEL: Not applicable
Extinguishing Media: Water spray or fog; foam, dry chemical powder, or BCF (where regulations permit).
Carbon dioxide.

See DOT ERG



Fire Diamond

General Fire Hazards/Hazardous Combustion Products: Will not burn but increases intensity of fire.
Heating may cause expansion or decomposition leading to violent rupture of containers.
Heat affected containers remain hazardous.
Contact with combustibles such as wood, paper, oil or finely divided metal may cause ignition, combustion or violent decomposition.
May emit irritating, poisonous or corrosive fumes.
Decomposes on heating and produces toxic fumes of nitrogen oxides (NO_x) and nitric acid.

Fire Incompatibility: Oxidizing agents as a class are not necessarily combustible themselves, but can increase the risk and intensity of fire in many other substances.
Reacts vigorously with water and alkali.
Avoid reaction with organic materials/compounds, powdered metals, reducing agents and hydrogen sulfide (H_2S) as ignition may result.
Reacts with metals producing flammable/explosive hydrogen gas.

Fire-Fighting Instructions: Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
Fight fire from a safe distance, with adequate cover.
Extinguishers should be used only by trained personnel.
Use water delivered as a fine spray to control fire and cool adjacent area.
Avoid spraying water onto liquid pools.
Do not approach containers suspected to be hot.
Cool fire-exposed containers with water spray from a protected location.
If safe to do so, remove containers from path of fire.
If fire gets out of control withdraw personnel and warn against entry.
Equipment should be thoroughly decontaminated after use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 6 - Accidental Release Measures

Small Spills: Dangerous levels of nitrogen oxides may form during spills of nitric acid.
Wear fully protective PVC clothing and breathing apparatus.
Clean up all spills immediately. No smoking, bare lights, ignition sources.
Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result.
Avoid breathing dust or vapors and all contact with skin and eyes.
Control personal contact by using protective equipment.
Contain and absorb spill with dry sand, earth, inert material or vermiculite. DO NOT use sawdust as fire may result.
Scoop up solid residues and seal in labeled drums for disposal.
Neutralize/decontaminate area.
Use soda ash or slaked lime to neutralize.



Large Spills: DO NOT touch the spill material. Restrict access to area.
Clear area of personnel and move upwind. Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
No smoking, flames or ignition sources. Increase ventilation.
Contain spill with sand, earth or other clean, inert materials.
NEVER use organic absorbents such as sawdust, paper, cloth; as fire may result. Avoid any contamination by organic matter.
Use spark-free and explosion-proof equipment.
Collect any recoverable product into labeled containers for possible recycling. DO NOT mix fresh with recovered material.
Collect residues and seal in labeled drums for disposal.
Wash area and prevent runoff into drains. Decontaminate equipment and launder all protective clothing before storage and reuse.
If contamination of drains or waterways occurs advise emergency services.
DO NOT USE WATER OR NEUTRALIZING AGENTS INDISCRIMINATELY ON LARGE SPILLS.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Avoid generating and breathing mist. Do not allow clothing wet with material to stay in contact with skin.
Avoid all personal contact, including inhalation.
Wear protective clothing when risk of exposure occurs.
Use in a well-ventilated area.
WARNING: To avoid violent reaction, ALWAYS add material to water and NEVER water to material.
Avoid smoking, bare lights or ignition sources.
Avoid contact with incompatible materials.
When handling, DO NOT eat, drink or smoke.
Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately.
Launder contaminated clothing before reuse.
Use good occupational work practices. Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

Recommended Storage Methods: Stainless steel drum. Check that containers are clearly labeled.
Packaging as recommended by manufacturer.

Regulatory Requirements: Follow applicable OSHA regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use in a well-ventilated area.
Local exhaust ventilation may be required for safe working, i. e. , to keep exposures below required standards; otherwise, PPE is required.
If risk of overexposure exists, wear NIOSH-approved respirator.
Correct fit is essential to obtain adequate protection.
In confined spaces where there is inadequate ventilation, wear full-face air supplied breathing apparatus.

Personal Protective Clothing/Equipment:

Eyes: Chemical goggles. Full face shield.
DO NOT wear contact lenses. Contact lenses pose a special hazard; soft contact lenses may absorb irritants and all lenses concentrate them.

Hands/Feet: Bare unprotected skin should not be exposed to this material. Impervious, gauntlet length gloves i.e., butyl rubber gloves or Neoprene rubber gloves or wear chemical protective gloves, e.g. PVC.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Wear safety footwear or safety gumboots, e.g. Rubber.

Respiratory Protection:

Exposure Range >2 to <25 ppm: Supplied Air, Constant Flow/Pressure Demand, Half Mask

Exposure Range 25 to unlimited ppm: Self-contained Breathing Apparatus, Pressure Demand, Full Face

Other: Operators should be trained in procedures for safe use of this material.

Acid-resistant overalls or Rubber apron or PVC apron.

Ensure there is ready access to an emergency shower.

Ensure that there is ready access to eye wash unit.

Ensure that there is ready access to breathing apparatus.

Glove Selection Index:

BUTYL ..... Best selection
HYPALON ..... Best selection
NEOPRENE..... Best selection
NEOPRENE/NATURAL..... Best selection
PE/EVAL/PE ..... Best selection
SARANEX-23 ..... Best selection
NATURAL RUBBER..... Satisfactory; may degrade after 4 hours continuous immersion
NATURAL+NEOPRENE..... Satisfactory; may degrade after 4 hours continuous immersion
PVC..... Poor to dangerous choice for other than short-term immersion
NITRILE+PVC..... Poor to dangerous choice for other than short-term immersion

Section 9 - Physical and Chemical Properties

Appearance/General Info: Clear, colorless to slightly yellow liquid. Sharp strong odor.
CAUTION: exothermic dilution hazard.
HIGHLY CORROSIVE. Corrosive to most metals. Powerful oxidizing agent.
Darkens to brownish color on aging and exposure to light.

Physical State: Liquid
Odor Threshold: 0.75 to 2.50 mg/m^3
Vapor Pressure (kPa): 8.26
Vapor Density (Air=1): 1.5
Formula Weight: 63.02
Specific Gravity (H_2O=1, at 4 °C): 1.3-1.42
pH: < 1

pH (1% Solution): 1
Boiling Point: 83 °C (181 °F) at 760 mm Hg
Freezing/Melting Point: -42 °C (-43.6 °F)
Volatile Component (% Vol): 100 (nominal)
Decomposition Temperature (°C): Not applicable
Water Solubility: Soluble in all proportions

Section 10 - Stability and Reactivity

Stability/Polymerization/Conditions to Avoid: Presence of heat source and direct sunlight. Storage in unsealed containers. Hazardous polymerization will not occur.

Storage Incompatibilities: Segregate from reducing agents, finely divided combustible materials, combustible materials, sawdust, metals and powdered metals.

Avoid contamination of water, foodstuffs, feed or seed.

Segregate from alkalies, oxidizing agents and chemicals readily decomposed by acids, i.e. cyanides, sulfides, carbonates.

Section 11 - Toxicological Information

Toxicity

Oral (human) LD_{Lo}: 430 mg/kg
Inhalation (rat) LC_{50}: 2500 ppm/1 hr
Unreported (man) LD_{Lo}: 110 mg/kg

Irritation

Nil reported

See *RTECS* QU 5775000, for additional data.

Section 12 - Ecological Information

Environmental Fate: No data found.

Ecotoxicity: LC_{50} Starfish 100-300 mg/l/48 hr /Aerated water conditions; LC_{50} Shore crab 180 mg/l/48 hr /Static, aerated water conditions; LC_{50} Cockle 330-1000 mg/l/48 hr /Aerated water conditions

BCF: no food chain concentration potential

Biochemical Oxygen Demand (BOD): none

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 13 - Disposal Considerations

Disposal: Recycle wherever possible. Special hazards may exist - specialist advice may be required.
Consult manufacturer for recycling options.
Follow applicable federal, state, and local regulations.
Treat and neutralize at an approved treatment plant.
Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.
Puncture containers to prevent reuse and bury at an authorized landfill.

Section 14 - Transport Information

DOT Hazardous Materials Table Data (49 CFR 172.101):

Note: This material has multiple possible HMT entries. Choose the appropriate one based on state and condition of specific material when shipped.

Shipping Name and Description: Nitric acid *other than red fuming, with more than 70 percent nitric acid*



ID: UN2031
Hazard Class: 8 - Corrosive material
Packing Group: I - Great Danger
Symbols:
Label Codes: 8 - Corrosive, 5.1 - Oxidizer
Special Provisions: B47, B53, T10, TP2, TP12, TP13
Packaging: **Exceptions:** None **Non-bulk:** 158 **Bulk:** 243
Quantity Limitations: **Passenger aircraft/rail:** Forbidden **Cargo aircraft only:** 2.5 L
Vessel Stowage: **Location:** D **Other:** 44, 66, 89, 90, 110, 111

Shipping Name and Description: Nitric acid *other than red fuming, with not more than 70 percent nitric acid*



ID: UN2031
Hazard Class: 8 - Corrosive material
Packing Group: II - Medium Danger
Symbols:
Label Codes: 8 - Corrosive
Special Provisions: B2, B47, B53, IB2, T8, TP2, TP12
Packaging: **Exceptions:** None **Non-bulk:** 158 **Bulk:** 242
Quantity Limitations: **Passenger aircraft/rail:** Forbidden **Cargo aircraft only:** 30 L
Vessel Stowage: **Location:** D **Other:**

Shipping Name and Description: Nitric acid, red fuming



ID: UN2032
Hazard Class: 8 - Corrosive material
Packing Group: I - Great Danger
Symbols: + - Override definitions
Label Codes: 8 - Corrosive, 5.1 - Oxidizer, 6.1 - Poison *or* Poison Inhalation Hazard *if inhalation hazard, Zone A or B*
Special Provisions: 2, B9, B32, B74, T20, TP2, TP12, TP13, TP38, TP45
Packaging: **Exceptions:** None **Non-bulk:** 227 **Bulk:** 244
Quantity Limitations: **Passenger aircraft/rail:** Forbidden **Cargo aircraft only:** Forbidden
Vessel Stowage: **Location:** D **Other:**

Section 15 - Regulatory Information

EPA Regulations:
RCRA 40 CFR: Not listed
CERCLA 40 CFR 302.4: Listed per CWA Section 311(b)(4) 1000 lb (453.5 kg)
SARA 40 CFR 372.65: Listed
SARA EHS 40 CFR 355: Listed
RQ: 1000 lb
TPQ: 1000 lb
TSCA: Listed

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

Section 16 - Other Information

Disclaimer: Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

Copyright © 2006 Genium Group, Inc. Any commercial use or reproduction without the publisher's permission is prohibited.

CDM

The Sherwin-Williams Company

Remedial Action Plan
Emeryville, California

June 11, 2010

One Walnut Creek Center, 100 Pringle Avenue, Suite 300
Walnut Creek, California 94596
tel: 925 933-2900
fax: 925 933-4174

June 11, 2010

Barbara J. Cook, P.E., Chief
Department of Toxic Substances Control
Northern California Coastal Cleanup Operations Branch
700 Heinz Avenue, Suite 200
Berkeley, California 94710

Attention: Janet Naito

Subject: Transmittal of Remedial Action Plan, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California, Imminent and Substantial Endangerment Determination and Order and Remedial Action Order, Docket No. IS/E 05/06-007

Dear Ms. Naito:

On behalf of The Sherwin-Williams Company, CDM is pleased to submit the enclosed Remedial Action Plan for the Sherwin-Williams Emeryville, California Site. The Site is the subject of the order issued on May 10, 2006 by the DTSC, entitled "Imminent and Substantial Endangerment Determination and Order and Remedial Action Order, Docket No. IS/E 05/06-007" ("the DTSC Order"). This report was prepared in accordance with Section 5.6 of the DTSC Order.

In accordance with the DTSC Order, this report is presented in both hard (paper) and electronic (as multiple pdf files on a CD) formats. If you have any questions, please call Pawan Sharma, Project Manager for CDM, (925) 296-8054, or Larry Mencin, Environmental Project Manager for the Sherwin-Williams Company, (216) 566-1768.

Very truly yours,

Randall T. Smith, P.E.
Camp Dresser & McKee Inc.

Pawan Sharma, P.E.
Camp Dresser & McKee Inc.

Enclosure

Distribution List (electronic format only):

Flora Chan
BAAQMD
939 Ellis Street
San Francisco, CA 94109

Michael Berg
Novartis
4560 Horton Street
Emeryville, CA 94608

Markus B Niebanck
City of Emeryville Redevelopment Agency
1333 Park Avenue
Emeryville, CA 94608

Donna Drogos
Alameda County Public Health Department
1000 Broadway Suite 500
Oakland, CA 94607

Paul Germain
45th Street Artists' Cooperative
1420 45th Street
Emeryville, CA 94608

Jody Sparks
Toxics Assessment Group
P.O. Box 186
Stewarts Point, CA 95480

Anders Lundgren and Mark Johnson
Regional Water Quality Control Board
1515 Clay St., Suite 1400
Oakland, CA 94612

Carol M. Campagna
Shell Oil Products US
20945 S. Wilmington Avenue
Carson, CA 90810

Remedial Action Plan

June 11, 2010

Prepared For:

The Sherwin-Williams Company
101 Prospect Avenue NW
Cleveland, OH 44115-1075

CERTIFICATION:
This document was prepared under the direction and supervision of qualified, registered professionals.







Randall T. Smith, P.E.
Camp Dresser & McKee Inc.

Michael J. Smith, P.G.
Camp Dresser & McKee Inc.

Pawan K. Sharma, P.E.
Camp Dresser & McKee Inc.

Contents

Section 1 Introduction and Purpose

1.1 Background 1-1
1.2 Purpose 1-2
1.3 Project Administration Responsibilities 1-3
1.4 Report Organization 1-3

Section 2 Site Description

2.1 Site Location and Description 2-1
2.1.1 Sherwin-Williams Property 2-1
2.1.2 Former Rifkin Property 2-1
2.1.3 Adjacent Properties 2-1
2.2 Site History 2-2
2.2.1 History of the Sherwin-Williams Property 2-2
2.2.2 History of Former Rifkin Property 2-4
2.3 Physical and Environmental Characteristics 2-4
2.3.1 Regional Geology 2-4
2.3.2 Site Geology 2-5
2.3.3 Hydrogeology 2-6
2.3.4 Temescal Creek 2-8
2.4 Previous Investigations, Risk Assessments, and Interim Remedial Actions 2-10
2.4.1 Remedial Investigations 2-10
2.4.2 Nature and Extent of COCs 2-11
2.4.3 Conceptual Site Model 2-15
2.4.4 Risk Assessment 2-24
2.4.5 Interim Remedial Measures 2-27
2.5 Summary of Treatability Study Findings 2-29
2.5.1 In Situ Groundwater Treatment 2-29
2.5.2 In Situ Soil Treatment 2-35

Section 3 Remedial Action Objectives

3.1 Applicable or Relevant and Appropriate Requirements 3-1
3.1.1 Definition of ARARs 3-1
3.1.2 Types of ARARs 3-2
3.1.3 Identification Process for ARARs/TBCs 3-3
3.2 Remedial Action Objectives 3-3
3.3 Cleanup Goals 3-4
3.3.1 Comparative Analysis 3-5

Section 4 Remedial Action Alternatives

4.1 Description of Remedial Action Alternatives 4-1
4.1.1 Alternative 1 4-2
4.1.2 Alternative 2 4-2
4.1.3 Alternative 3A 4-2
4.1.4 Alternative 3B 4-7

4.1.5 Alternative 3C....4-7
4.1.6 Alternative 4A....4-11
4.1.7 Alternative 4B....4-13
4.1.8 Alternative 5A....4-13
4.1.9 Alternative 5B....4-14
4.1.10 Alternative 6....4-14
4.1.11 Alternative 7....4-17
4.2 Evaluation of Remedial Action Alternatives....4-17
4.2.1 Threshold Criteria....4-18
4.2.2 Primary Balancing Criteria....4-18
4.2.3 Modifying Criteria....4-20
4.3 Basis for Selected Remedial Action....4-20
4.4 State Evaluation Process....4-21
4.4.1 Health and Safety Risks....4-21
4.4.2 Beneficial Uses of Site Resources....4-21
4.4.3 Effect of Remedial Actions on Groundwater Resources....4-21
4.4.4 Site-Specific Characteristics....4-21
4.4.5 Cost-Effectiveness of Alternative Remedial Action Measures....4-22
4.4.6 Potential Environmental Impacts of Remedial Action....4-22

Section 5 Planning and Pre-Remediation
5.1 Preliminary Implementation Schedule....5-1
5.2 Planning....5-1
5.3 Pre-Remediation....5-2
5.3.1 Site Health and Safety Plans....5-2
5.3.2 Storm Water Pollution Prevention Plan....5-3

Section 6 Remediation and Restoration
6.1 Construction Area Layout and Controls....6-2
6.1.1 Engineered Controls During Remediation....6-2
6.2 Monitoring of Engineering Controls....6-4
6.2.1 Perimeter Air Monitoring and Sampling....6-4
6.2.2 Noise Monitoring....6-7
6.3 Vapor Extraction and Treatment....6-8
6.4 Removal of Raised Cap....6-9
6.5 Shoring Along Horton Street....6-10
6.6 Excavation Dewatering....6-11
6.7 Soil Excavation and Handling....6-12
6.8 Waste Stockpiles....6-13
6.9 Loading and Off-Site Transport....6-14
6.9.1 Rail Car....6-14
6.9.2 Truck....6-15
6.9.3 Decontamination....6-15
6.10 Slurry Wall Breach and Extension....6-16
6.11 Excavation Backfilling....6-17
6.12 Reporting....6-19

Section 7 Post Remediation Monitoring
7.1 Operations, Maintenance, and Monitoring Program....7-1
7.1.1 Soil Gas Evaluation....7-1
7.1.2 Soil Management....7-1
7.1.3 Health and Safety....7-2
7.1.4 Site Maintenance....7-2
7.1.5 Land Use Covenants....7-2
7.2 Groundwater Monitoring Program....7-3
7.2.1 Groundwater Monitoring Well Locations....7-4
7.2.2 Monitoring Frequency and Sample Analysis....7-6
7.2.3 Groundwater Quality Effectiveness Criteria....7-10
7.2.4 Groundwater Movement Effectiveness Criteria....7-11
7.2.5 Remedy Effectiveness Evaluation....7-12
7.3 Contingency Action....7-15
7.3.1 Active Groundwater Extraction and Treatment....7-16
7.4 Reporting....7-17

Section 8 References

Appendices

Appendix A Selected Remedial Investigation Figures and Tables
Appendix B Selected Feasibility Study Figures and Tables
Appendix C Determination of Chemicals of Potential Concern
Appendix D Statement of Reasons
Appendix E Non-Binding Allocation of Responsibility
Appendix F California Environmental Quality Act Documentation
Appendix G Selected Public Health Evaluation Figures and Tables
Appendix H Confirmation Vadose Zone Soil Sampling and Analysis Plan
Appendix I Stockpile Soil Sampling and Analysis Plan
Appendix J Criteria for Implementing Active Groundwater Extraction
Appendix K Contingency Groundwater Extraction Action Evaluation
Appendix L Responsiveness Summary

Tables (located at end of each section)

2-1 RBTLs for COCs in Vadose Zone Soil
2-2 RBTLs for COCs in Groundwater
3-1 Summary of Applicable or Relevant and Appropriate Requirements
3-2 Cleanup Goals for COCs in Vadose Zone Soil
3-3 Cleanup Goals for COCs in Groundwater
5-1 Existing Wells Proposed for Abandonment
6-1 Summary of Engineered Controls for Short Term Exposure Risks
6-2 Action Levels for Volatile Organic Compounds
6-3 Action Levels for PM10, Arsenic, and Lead
7-1 Well Construction Details and Monitoring Program During Remedy Implementation
7-2 Well Construction Details and Monitoring Program After Remedy Implementation
7-3 Remedy Effectiveness Evaluation Criteria
7-4 Criteria for Implementing Active Groundwater Extraction
7-5 Criteria to Terminate Active Groundwater Extraction

Figures (located at end of each section)

2-1 Site Location Map
2-2 Site Plan
2-3 Geologic Cross Section Locations
2-4 Geologic Cross Section A-A'
2-5 Geologic Cross Section B-B'
2-6 Geologic Cross Section C-C'
2-7 Conceptual Site Model
4-1 Remedial Alternative 3A
4-2 Remedial Alternative 3B
4-3 Remedial Alternative 3C
4-4 Remedial Alternative 4A
4-5 Remedial Alternative 4B
4-6 Remedial Alternative 5A
4-7 Remedial Alternative 5B
4-8 Remedial Alternative 6
4-9 Remedial Alternative 7
5-1 Preliminary Project Schedule
5-2 Existing Wells Proposed for Abandonment
6-1 Preliminary Site Layout and Controls
6-2 Preliminary Soil Vapor Extraction Layout
6-3 Preliminary Slurry Wall Breach Detail
6-4 Preliminary Truck Transportation Route Map
7-1 Preliminary Post Remedy Installation Groundwater Monitoring Locations

Acronyms

ARARs	applicable or relevant and appropriate requirements
BAAQMD	Bay Area Air Quality Management District
bgs	below ground surface
CA	California
CAA	Clean Air Act
Cal/OSHA	California Occupational Safety and Health Act
CCR	California Code of Regulations
CCRS	Current Conditions Risk Screen
CDM	Camp Dresser & McKee Inc.
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CH&SH	California Health and Safety Code
CKD	cement kiln dust
COC	chain-of-custody
COC	chemical of concern
CWA	Clean Water Act
DCA	dichloroethane
DCE	dichloroethene
DTSC	Department of Toxic Substances Control
EBMUD	East Bay Municipal Utility District
EIR	Environmental Impact Report
FS	feasibility study
ft	feet
GC	gas chromatograph
GWET	groundwater extraction and treatment
HASP	health and safety plan
HHRA	human health risk assessment
HSWA	Hazardous and Solid Waste Amendments
HWCA	Hazardous Waste Control Act
IRM	interim remedial measure
IS/MND	initial study/mitigated negative declaration
LDR	land disposal restriction
LFR	Levine-Fricke-Recon
LUC	land use control
MCL	maximum contaminant level
µg/kg	microgram per kilogram
µg/m^3	microgram per cubic meter
µg/cm	microgram per centimeter
mg/kg	milligram per kilogram
mg/L	milligram per liter
MSE	MSE Technology Applications, Inc.

MSL	mean sea level
MT2	Metals Treatment Technologies, LLC
NAAQS	National Primary and Secondary Ambient Air Quality Standards
NCP	National Contingency Plan
NESHAP	National Emissions Standards for Hazardous Air Pollutant
NOI	notice of intent
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health
PDP	preliminary development plan
PEL	permissible exposure limit
PM10	particle measuring 10 microns or less
POTW	publicly owned treatment works
PPE	personal protective equipment
ppb	parts per billion
ppm	parts per million
PRG	preliminary remedial goal
QA	quality assurance
QC	quality control
RA	risk assessment
RAL	remedial action level
RAO	remedial action objective
RBTL	risk-based target level
RCRA	Resource Conservation and Recovery Act
RG	remedial goal
RI	remedial investigation
RMP	risk management plan
S-W	Sherwin-Williams
SAAQS	State Ambient Air Quality Standards
SAP	sampling and analysis plan
SHSO	site health and safety officer
SPLP	synthetic precipitation leaching procedure
STLC	solubility threshold limit concentration
SVOC	semi-volatile organic compound
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resource Control Board
TBC	to be considered
TCE	trichloroethene
TCLP	toxicity characteristic leaching procedure
TDS	total dissolved solids
TPH	total petroleum hydrocarbon
TSDF	treatment, storage, and disposal facility
TTLC	total threshold limit concentration
UHC	underlying hazardous constituent
UPRR	Union Pacific Railroad
USC	United States Code
USEPA	United States Environmental Protection Agency
UTS	Universal Treatment Standard

VOC	volatile organic compound
Water Board	California Regional Water Quality Control Board
WET	waste extraction method

Section 1
Introduction and Purpose

On behalf of the Sherwin-Williams Company (S-W), Camp Dresser & McKee Inc. (CDM) has prepared this Remedial Action Plan (RAP) to address remediation of the S-W property located at 1450 Sherwin Avenue in Emeryville, California and a portion of the adjacent former Rifkin property, located at 4525 – 4563 Horton Street, to which hazardous substances have migrated from the S-W property. Collectively the S-W property and this portion of the former Rifkin property are referred to as the "Site" within this document. The Site consists of approximately 10 acres and is identified by Assessor's Parcel numbers 049-1041-006-00, 049-1041-026-02, 049-1041-026-06, 049-1041-026-07, 049-1041-026-04, and 049-1041-005-00. Novartis Vaccines and Diagnostics, Inc. (Novartis) is the current owner of the former Rifkin property.

The RAP was prepared in accordance with the following:

- National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (USEPA, 1990);
- Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA (USEPA, 1988);
- A Guide to Developing and Documenting Cost Estimates During the Feasibility Study (USEPA, 2000);
- US Environmental Protection Agency (USEPA) Region IX Sampling and Analysis Plan Guidance (USEPA, 1997);
- California Health and Safety Code (CHSC) section 25356.1; and
- Department of Toxic Substances Control (DTSC) Imminent and Substantial Endangerment Determination and Order and Remedial Action Order No. 05/06-007 (the Order) (Cal/EPA, 2006b).

1.1 Background

S-W has owned and operated the coatings manufacturing plant at 1450 Sherwin Avenue since the early 1900s. Pesticides containing lead and arsenic were also manufactured at the plant from the 1920s until the late 1940s. The plant converted from oil-based to water-based paint production in 1987. The plant was used for latex paint manufacturing and packaging, storage of raw materials and paint products, and laboratory space until December 2006 when operation of the plant stopped and the plant was decommissioned. S-W initiated plant demolition activities in August 2007, which were completed in early November 2007.

Prior to the issuance of the current DTSC Imminent and Substantial Endangerment Determination and Order and Remedial Action Order No. 05/06-007 (the Order)

(Cal/EPA, 2006b) for the Site on May 10, 2006, the Site was regulated by the Regional Water Quality Control Board, San Francisco Bay Region, (Water Board) under Site Cleanup Requirements Order 98-009.

Several phases of soil and groundwater investigation have been conducted at the Site since 1988. The investigations have revealed that the chemicals of concern (COCs) in the soil and groundwater are metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and total petroleum hydrocarbons (TPHs). The investigations concluded that COCs have migrated from the S-W property onto a portion of the adjacent former Rifkin property. Site soil and groundwater data through October 2000 are summarized in the remedial investigation (RI) report (ENTRIX, 2002). Since October 2000, results from periodic groundwater monitoring events have been summarized in a series of reports, the most recent for Second Half 2007 (LFR, 2008). In addition, several investigations have been conducted after October 2000 to complete characterization of the Site and to gather data in support of this FS report; these investigations are further discussed in Section 2.4.

Several interim remedial measures (IRMs) were implemented at the Site in the early 1990s to control the flow of COCs in groundwater off the Site and reduce the potential for human exposure to the COCs. The potential human health effects of the COCs in Site soil and groundwater for current and future scenarios are summarized in the Site risk assessment (RA) reports (EarthRisk, 2002 and Gradient, 2005). The IRMs are still in place at the Site and include a slurry wall, an asphalt cap, extraction and monitoring wells, and a groundwater treatment system.

In late 2006, a feasibility study (FS), including treatability studies, was initiated for selecting the final remedial action for the Site. The findings were presented in a FS report (CDM, 2009b). The FS report was approved by DTSC on May 7, 2009 (Cal/EPA, 2009).

1.2 Purpose

The purpose of the RAP is to summarize the selected final remedial action for the Site and its proposed implementation activities. In addition, the RAP summarizes previous investigations and studies, including evaluation of remedial action alternatives as presented in the FS.

Specific objectives of the RAP are to:

- Identify project administrative responsibilities;
- Present planning, pre-remediation, remediation, and reporting tasks of the selected remedial action; and
- Provide a tentative schedule for the remedial action.

1.3 Project Administration Responsibilities

Several entities and individuals will be responsible for the successful completion of the remedial action. Their specific responsibilities are described below.

Responsible Party: The Sherwin-Williams Company. Larry Mencin is the designated Project Manager for S-W. He is the corporate representative at all agency meetings; he is responsible for assuring that sufficient funding is available to complete the approved remedial activities; he is responsible for communication between senior corporate management and the rest of the remediation project team.

Lead Agency: Department of Toxic Substances Control (DTSC). Janet Naito is the designated Project Manager for the DTSC. She is responsible for assuring that S-W complies with all the requirements in the existing Order. As the lead agency representative, she is responsible for communicating all project activities to senior DTSC management as necessary. She is also responsible for all project communication with the general public, including the immediate residents around the Site. Representatives from the Water Board, City of Emeryville, Novartis, Shell Oil Company, S-W, and the local resident communities, serve advisory roles to the DTSC on this project.

Program Manager: Camp Dresser & McKee Inc. (CDM). CDM is the remediation program manager for the project. Randall Smith is the designated Program Manager for CDM. He and his representatives are responsible for all direct communication between CDM and S-W, and CDM and the DTSC. He is also responsible for the health and safety of all CDM workers and their subcontractors during all phases of site remediation. Working with Mr. Smith will be CDM Design Manager, Construction Manager, Field Environmental Manager, and a Health and Safety Manager.

Remediation Contractors: To Be Determined. S-W will select one or more contractors to perform the work described in this section and presented in more detail in the specifications yet to be prepared. CDM will oversee the remediation management. Selected remediation contractors will be responsible for preparation and implementation of required City permits, a worker Health and Safety Plan, and applicable noise, traffic, dust control, and/or other compliance plan submittals.

1.4 Report Organization

This RAP document is structured as follows:

- **Section 1, Introduction and Purpose**.
- **Section 2, Site Description**. Includes a summary of the Site location, description, and history; and, a summary of previous Site-specific remedial activities, including remedial investigations, risk assessments, current interim remedial measures, and treatability studies.

- **Section 3, Remedial Action Objectives**. Presents project-specific remedial action objectives (RAOs) and underlying applicable or relevant and appropriate requirements (ARARs) and preliminary remediation goals (PRGs).

- **Section 4, Remedial Action Alternatives**. Summarizes the findings of the FS, including identification, description, and evaluation of remedial action alternatives; and presents the basis for the selected action.

- **Section 5, Planning and Pre-Remediation**. Presents the preliminary implementation schedule for the action, planning activities prior to mobilization for the remedy, and pre-remediation Site activities to support the remedy.

- **Section 6, Remediation and Restoration**. Provides details on the implementation of the remediation activities, including excavation, backfill, off-hauling materials, and restoration.

- **Section 7, Post Remediation Monitoring**. Presents a summary of post remedy implementation monitoring.

- **Section 8, References**.

- **Appendix A, Selected Remedial Investigation Figures and Tables**. Presents figures and/or tables from the Site RI report and subsequent investigation reports showing sample locations, extent of impact for various COCs in soil and groundwater, and findings from these investigations.

- **Appendix B, Selected Feasibility Figures and Tables**. Presents figures and tables from the Site FS report showing remedial action alternatives and their evaluation process.

- **Appendix C, Determination of Chemicals of Potential Concern**. Summarizes the methods presented in the HHRA for selection of COCs for the Site, provides updated findings based on remedial investigations conducted subsequent to the HHRA being finalized.

- **Appendix D, Statement of Reasons**. Presents the reasons for selection of the preferred remedial action with respect to the six State of California evaluation criteria.

- **Appendix E, Non-Binding Allocation of Responsibility**. Presents DTSC's preliminary nonbonding allocation of responsibility for addressing contamination at the Site.

- **Appendix F, California Environmental Quality Act Documentation**. Presents DTSC's California Environmental Quality Act (CEQA) Mitigated Negative Declaration for this Site.

- **Appendix G, Selected Public Health Evaluation Figures and Tables**. Presents figures and tables from the Site PHERA report showing performance standards and action levels for COCs to be used during perimeter air monitoring.

- **Appendix H, Confirmation Vadose Zone Soil Sampling and Analysis Plan**. Presents the methods and scope for sampling and analysis of vadose zone soil during excavation.

- **Appendix I, Stockpile Soil Sampling and Analysis Plan**. Presents the methods and scope for sampling and analysis of stockpiles of excavated soils.

- **Appendix J, Criteria for Implementing Active Groundwater Extraction.** Presents the evaluation for determining the appropriate groundwater extraction contingency action criteria for arsenic at the slurry wall breaches along the Union Pacific Railroad property.

- **Appendix K, Contingency Groundwater Extraction Action Evaluation.** Presents the evaluation of groundwater extraction as a possible contingency action after implementation of the preferred remedy.

- **Appendix L, Responsiveness Summary.** Presents DTSC's response to comments submitted during the public comment period for the RAP and the CEQA Mitigated Negative Declaration.

Section 2
Site Description

This section describes the Site and surrounding area, and summarizes the Site history. In addition, summaries of the remedial investigations, risk assessments, interim remedial actions, and treatability studies performed to date at the Site are presented in this section.

2.1 Site Location and Description

The Site consists of the S-W property located at 1450 Sherwin Avenue in Emeryville, California, and a portion of the adjacent former Rifkin property, located at 4525 – 4563 Horton Street, to which hazardous substances have migrated from the S-W property. Figure 2-1 presents the location of the S-W property and the entire former Rifkin property. Figure 2-2 presents a plan view of the Site. This section provides a description of the S-W property, the former Rifkin property, and other adjacent properties.

2.1.1 Sherwin-Williams Property

The S-W property is located at 1450 Sherwin Avenue in Emeryville, Alameda County, California. The S-W property is located on the north side of Sherwin Avenue, between Horton Street and the Union Pacific Railroad (UPRR) lines. S-W has operated at the property since the early 1900's, most recently manufacturing water-based paints at the property. Subsequent to demolition activities that concluded in late November 2007, the property is now covered by asphalt/concrete paved areas, including the foundations for several demolished buildings, and two remaining buildings (Buildings 1 and 31). Past uses for the buildings have included: coating manufacturing; storage of raw materials and coating products; laboratories; and filling and packaging.

2.1.2 Former Rifkin Property

The former Rifkin property is located along the western side of Horton Street, adjacent to the north and east of portions of the S-W property. The former Rifkin property is owned by Novartis. The portion of the former Rifkin property included as part of the Site is currently covered by asphalt and serves as a parking lot.

2.1.3 Adjacent Properties

Properties located adjacent to or within close proximity to the Site include residential, commercial and industrial types. These other properties include: the former Shell Development property (currently South BGR property and 45th Street Artist Co-op); the former Southern Pacific Railroad (SPRR) (currently UPRR); the former Myers Container property and the former Elementis Pigment property (both currently Bay Street Partners LLC property); former Barbary Coast Steel property (currently IKEA Property Inc.); a former Sears Warehouse (currently Bayer-leased warehouse and East Bay Badminton Club); and multi-family residential buildings (i.e., Emeryville Lofts,

Horton Street Lofts, and Artists Co-op Annex). The nearest residences to the Site are opposite Sherwin Avenue and Horton Street, approximately 60 feet from the Site boundaries.

The South BGR/former Shell Development property, located east of Horton Street, consists of a few buildings that are currently leased to Novartis. The former Elementis Pigment property and the former Myers Container property, located northwest of the Site, have been remediated (through excavation with long-term groundwater monitoring) and developed for mixed-use purposes, including high-density residential, commercial, and retail use. The former Barbary Coast Steel property, located to the west of the Site, is currently occupied by an IKEA retail store.

2.2 Site History

This section provides a brief summary of the history of the S-W property and the former Rifkin property. The source of this information is the 2002 ENTRIX Site RI report (ENTRIX, 2002).

2.2.1 History of the Sherwin-Williams Property

From 1871 through 1915, the S-W property and much of the adjacent properties were initially part of a larger property first used as a horse track, known as the Oakland Trotting Park, and then as a gathering place for local aviators, known as the Oakland Aviation Field. By 1915, the field had fallen into disrepair, and the buildings were removed. The property was subdivided into smaller properties to sell to industries interested in moving to the Emeryville area.

The S-W property was part of the early wave of industrial development in the City of Emeryville. One of the earliest references to S-W presence in Emeryville was in the 1923 Oakland Tribune Yearbook. The Tribune indicated new businesses that had moved into their readership area with a location map. This map indicated that S-W built their plant in 1919 on three acres, and by 1923 had increased their property to six acres. A number of industries, warehouses, and railroad services developed over time on the adjacent properties. A general operational history of facilities at the S-W property and several nearby properties is provided below.

Since operations began, the S-W facility has been manufacturing various types of coating products. Lead-arsenate pesticides were also manufactured at the plant from the 1920s until the late 1940s. By 1987, S-W ceased manufacturing oil-based products and until late 2006 manufactured only water-based products.

In approximately 1920, buildings were constructed on the property for general warehouse, paint, and lead arsenate manufacturing and storage. Additional buildings were constructed in 1924 and 1926 for lead arsenate production and lacquer blending. Based on a 1933 aerial photo, areas adjacent to these buildings appear to have been unpaved. During this time, a railroad track spur was present in the middle of the S-W property, and seven sets of railroad tracks were present immediately off-site to the west. A production well to furnish water for the sprinkler system was

located in the north-central portion of the S-W property; the production well was taken offline in the 1980s and destroyed in the 1990s via pressure-grouting. The East Bay Chemical Company was located immediately north of the S-W property, and the east and south sides of the S-W property were bordered by Horton Street and Sherwin Avenue.

In the mid to late 1940s, lead-arsenate production and storage ceased, and only oil-based paints and varnishes were manufactured. By 1956, several of the older buildings at the S-W property had been demolished, and the railroad tracks immediately to the west of the S-W property were removed. New buildings were constructed over the footprint of demolished buildings, and storage tanks were installed to store alcohols and acetates. These chemicals were used in the production of lacquer.

In 1956, the solvents used in the manufacturing process were naphtha and kerosene. Through the 1970s, several types of solvents were used, such as naphtha, styrene, xylene, toluene, ketones, and acetone. Acetone was used as a low-boiling point thinner in some lacquers. Methyl isobutyl ketone was a medium boiling point thinner used in resins, enamels, and lacquers. Nitrocellulose was a binder being used in the early 1970s in the production of lacquers. Toluene and xylene were thinners commonly used in the late 1970s. The liquids were usually stored in aboveground storage tanks.

By 1964, Sherwin-Williams purchased the adjacent property to the west from the Southern Pacific Railroad creating the current 8.3-acre property. A large portion of this property was originally developed into a warehouse (Building 35) that was converted into manufacturing in 1987.

The 1987 switch from oil-based to water-based paint products was reflected by the following changes at the S-W property:

- Dismantling of the solvent tank farm and the removal of most of the solvents and oil.
- Removal of varnish production and storage facilities.
- Removal of the lacquer plant.
- Expansion of the latex and latex-product storage tanks.
- Expansion of water-based paint manufacturing into building 35.

Paint manufacturing operations ceased in December 2006 and the plant was decommissioned. S-W initiated plant demolition activities in August 2007, which were completed in November 2007.

2.2.2 History of Former Rifkin Property

The former Rifkin Property was also originally part of the larger area of the Oakland Trotting Park and later California Jockey Club Race Track until approximately 1915. It is uncertain what types of businesses operated on this property from 1915 to approximately 1928, although it is known that these early businesses included the East Bay Chemical Company.

Based on a chain-of-title search for the former Rifkin Property, during 1928 to 1937, one portion of the property was occupied by Rotary Oil and the other portion was occupied by Rheem Manufacturing and then owned by the Chubbucks. Both of these portions were combined and transferred to the California Container Corporation in 1937, which produced corrugated shipping containers and boxes. In 1958, the Container Corporation of America took control of California Container Corporation and the property. The Concora Corporation owned and operated the property between 1969 and 1978. Rifkin Investments purchased the property in 1978 and rented portions of building space to various small businesses including a small furniture refinisher, a silkscreen company, an automobile body and paint shop, and a foreign auto repair shop. The Chiron Corporation acquired the property in 1996. In 2006, Novartis acquired Chiron Corporation and became the property owner.

Several underground storage tanks (including heating oil, gasoline, coatings, and a diesel tank) existed on the Rifkin property as early as the 1940s.

2.3 Physical and Environmental Characteristics

This section provides a summary of the:

- regional geology;
- site geology;
- groundwater zones underlying the Site and their hydrogeology; and
- surface water system and groundwater-surface water interaction.

The source of this information is the 2002 ENTRIX Site RI report (ENTRIX, 2002).

2.3.1 Regional Geology

The Site is located on the eastern flank of the San Francisco Basin, which roughly corresponds to present day San Francisco Bay (herein referred to as the bay). The bay is formed by a major asymmetrical basement synform within the Coast Range Province. It is bounded on the east by the Hayward Fault and on the west by the San Andreas Fault. The trace of the Hayward Fault occurs in the Berkeley Hills, approximately 3.5 miles to the east of the Site. Basement rock underlying the bay consists of the Franciscan Complex. Bedrock features trend northwest-southeast through the area and have influenced the depositional history of the bay. The

Franciscan bedrock is unconformably overlain by the Early Pleistocene Santa Clara Formation, which consists of continental alluvial fan deposits.

As the Franciscan was uplifted in the eastern portion of the basin, these alluvial fan deposits were themselves eroded and re-deposited. The non-marine alluvial deposits on the eastern flank of the basin have been mapped as the Alameda, San Antonio, and Temescal Formations. The seas flooded the central portion of the basin and the Santa Clara Formation eroded into the Alameda Formation. The Alameda Formation is restricted to the marine units beneath the bay up to and including the Young Bay Mud. The alluvial fan units located between the bay and the hills are referred to as the San Antonio or Temescal Formations.

The basin sank during the time of deposition of the Alameda Formation, allowing marine incursion. The Site, however, continued to be an uplifted zone of continental deposition. The alluvial units of the Temescal Formation range in thickness from 10 to 300 feet and average 100 to 200 feet. The transition from the alluvial fan deposits to the marine bay muds west of the Site occurs approximately along the line of the existing railroad tracks.

The Young Bay Mud of the Alameda Formation currently being deposited in the bay is black, unconsolidated, saturated, organic rich clay containing some gravel and sand layers, shell fragment layers, peat, and organic debris. The mud generally ranges in thickness from 50 to 75 feet. The deeper Yerba Buena Mud (Old Bay Mud) of the Alameda Formation is widespread homogeneous estuarine mud. It consists of black organic-rich clay averaging 25 to 50 feet thick, and typically containing a gravel/shell layer in the middle of the unit. This formation occurs to the west of the Site.

2.3.2 Site Geology

The Site is located on the East Bay Plain, approximately 0.3 miles east of the current bay shoreline and 3.5 miles west of the Hayward Fault. Surface soil elevation ranges between 12 and 18 feet NAVD88 (1988 North American Vertical Datum). Several creeks drain the western Oakland hills, flowing west to the bay. The nearest creek to the S-W property is Temescal Creek, which originates in the Oakland hills at Lake Temescal and enters an engineered channel that runs under/through Oakland and passes along the northern edge of the Site. The Site lies entirely in the drainage basin of Temescal Creek.

The soils underlying the Site consist of Holocene through Early Pleistocene alluvial sediments of the Temescal Formation (ENTRIX, 2002). The Temescal Formation is primarily an alluvial fan deposit, comprised of interfingering lenses of clayey gravel, sandy silty clay, and sand-clay-silt mixtures. Total thickness of the sediments based on deep coring near the Site is approximately 200 to 300 feet. In addition, it is likely that north-south trending shoreline deposits (i.e., eolian sand deposits) have also been placed at the Site, given the shorelines historical vicinity to the Site location, concurrently with the alluvial fan deposits. The Temescal Formation has been penetrated to a depth of approximately 60 feet below ground surface (bgs) at the Site

in boring IS-BH-07 and can be broken down into four general units (fill material, Unit A, aquitard, and Unit B).

The shallowest unit beneath the Site is engineered fill that consists of sands, silts, and gravels with concrete fragments. This fill extends from ground surface and ranges from 0 to 4 feet in thickness. The fill material unconformably overlies Unit A (which includes the A-zone groundwater), which consists predominately of silt and clay with discontinuous lenses of sand from approximately 4 feet to 20 feet bgs. The lenses have been observed to range in thickness from approximately 1 to 10 feet at investigated boreholes and rapidly change in thickness between nearby boreholes. There is evidence of several discontinuous sand zones occurring in Unit A that vary in thickness from 1 to 5 feet between nearby boreholes.

Unit A is underlain by approximately 30 feet of silty clay that acts as a local aquitard separating Unit A from Unit B. The top of the aquitard begins at approximately 25 feet bgs (corresponding to an elevation of approximately -11.5 feet NAVD88). The top of the A/B aquitard appears to be laterally continuous across the Site. Investigations have not revealed evidence of erosional features on the surface of the aquitard.

Unit B (which includes the B-zone groundwater) consists of primarily silty clay and clayey silt beginning at approximately 50 feet bgs. The total depth of Unit B has not been characterized, but the top of Unit B ranges from approximately 45 to 55 feet bgs. Similar to Unit A, Unit B includes discontinuous lenses of silty sand ranging between 1 and 3 feet thick situated between 50 and 60 feet bgs. The A/B aquitard is distinguished from Unit B by the characteristics of the more permeable lenses within the Unit B formation. The lenses in the aquitard consist of clayey sand with some silt, while the Unit B lenses consist of silty sand.

Figure 2-3 presents the locations of three cross sections at the Site. Figures 2-4, 2-5, and 2-6 present these cross sections of Unit A, A/B aquitard, and an upper portion of Unit B for these three transects across the Site.

2.3.3 Hydrogeology

The two zones of groundwater (A-zone and B-zone) are part of a single hydrogeologic unit, containing multiple alluvial fan and eolian shoreline deposits. Accordingly, different groundwater zones beneath the Site are referred to as water-bearing zones rather than aquifers. The A-zone and B-zone groundwater underlying the Site is not currently being used for drinking water supply, and has not been used in the past. The Site is not located within a groundwater recharge area (Norfleet, 1998).

2.3.3.1 Groundwater Flow in the A-Zone

The A-zone is a predominantly shallow, unconfined to semi-confined water-bearing zone. A-zone groundwater is present in relatively thin (approximately 2- to 5-feet thick), discontinuous, lenses of sand that are interbedded within less permeable silty/clayey sediments. Depth to groundwater across the general area of the Site can vary seasonally from approximately 3 to 12 feet bgs. Prior to the installation of the slurry wall and the groundwater extraction system, the direction of groundwater flow

across the Site was predominately west to northwest toward San Francisco Bay and Temescal Creek. Groundwater flow in the northernmost portion of the Site appears to be locally influenced by Temescal Creek. Groundwater flow towards Temescal Creek partially discharges into the Temescal Creek's drainage channel, but not directly into the surface water. Tidal fluctuations occur in areas near the Temescal Creek and affect the amount of groundwater flow entering the drainage channel. The surface water associated with Temescal Creek is further discussed in Section 2.3.4.

The flow of groundwater in the A-zone beneath the Site has been altered by the installation of the slurry wall and the groundwater extraction system in the 1990s (ENTRIX, 2002). The flow inside the slurry wall is generally toward the extraction wells. The groundwater gradient is generally steeper in the southern portion of the area enclosed by the slurry wall and generally flows toward the west in this area. The groundwater flow outside of the slurry wall is toward the west-northwest, generally consistent with pre-slurry-wall groundwater flow regime on the northern portion of the Site, and is influenced by proximity to the slurry wall, groundwater extraction wells, and Temescal Creek.

Based on pumping tests summarized in the RI, the transmissivity has been estimated to range between 4.1 and 633 square feet per day (ft^2/day), and the hydraulic conductivity ranges between 0.28 and 28 feet per day (ft/day). The results of a tidal study also measured transmissivities, and found 18.7 ft^2/day for the northern portion of the Site adjacent to Temescal Creek (ENTRIX, 2002). This value is based upon a month of monitoring, and is considered a more reliable measure of sitewide transmissivity than the short-term pump tests. Pumping tests conducted in February 2007, in support of the soil treatability study and further discussed in Section 2.5, estimated a hydraulic conductivity of approximately 3 ft/day for the A-zone within the central portion of the raised cap part of the Site (CDM, 2007b); this value is within the range reported for the Site in the RI.

Based on an estimated effective porosity of 0.12 (Freeze and Cherry, 1979), the average linear velocity of groundwater beneath the Site is approximately 0.24 ft/day. Groundwater elevations vary seasonally between 4 and 10 feet NAVD88 within the A-zone. Groundwater levels can fluctuate up to 3 feet seasonally, with highest in the wet season between December and February.

2.3.3.2 Groundwater Flow in the B-Zone

The B-zone is a confined unit with several feet of piezometric pressure head above the top of the A/B aquitard. Groundwater elevation measurements have consistently measured a vertical upward hydraulic gradient from the Unit B to the Unit A groundwater zone (ENTRIX, 2002).

The groundwater flow conditions within the B-zone do not appear to have been significantly impacted by the installation of the slurry wall and the groundwater extraction system, indicating the limited permeability of the confining unit separating the A-zone and the B-zone. The groundwater flow direction both before and after the installation of the slurry wall and extraction system is from the southeast toward the

northwest. Pumping tests indicate the transmissivity ranges between 128 and 132 ft^2/day, and a hydraulic conductivity of approximately 28 ft/day (ENTRIX, 2002). Based on an estimated effective porosity of 0.12, the average groundwater linear velocity is approximately 1.07 feet/day. Groundwater elevations vary between 6 and 9 feet NAVD88 within the B-zone and can fluctuate up to 2 feet seasonally. The water levels are highest in the wet season between December and February.

2.3.3.3 Groundwater Use

The 2002 ENTRIX Site RI report concluded that groundwater at the Site cannot feasibly be used for long-term water supply. The conclusion was based on an interpretation of Site data and the exemption criteria set forth in State Water Resources Control Board (SWRCB) Resolution No. 88-63. According to Resolution No. 88-63, waters are considered suitable, or potentially suitable, for municipal or domestic water supply except where:

a. "Total Dissolved Solids (TDS) exceeds 3000 milligrams per liter (mg/L) (5000 microSeimen/centimeter (µS/cm) electrical conductivity);

b. Contamination exists, that cannot reasonably be treated for domestic use; and

c. The source is not sufficient to supply an average sustained yield of 200 gallons per day."

As reported in the 2002 ENTRIX Site RI report, the average TDS across the S-W Property is 1,200 mg/L, and the central portion of the property exceeds 3,000 mg/L on average. Development of the shallow groundwater for supply would likely lead to saltwater intrusion, as documented for several nearby areas in the Norfleet study (1998), and cause expansion of the area that currently exceeds 3,000 mg/L.

2.3.4 Temescal Creek

The Site resides within the Temescal Creek watershed. The northwest extent of the Site borders with Temescal Creek (see Figure 2-2).

2.3.4.1 Temescal Creek Watershed

The Temescal Creek watershed encompasses a 6.68 square mile (sq. mi.) area with headwaters in the Berkeley Hills on the north and south sides of Highway 24. The upper watershed has ridge elevations of approximately 1,200 to 1,300 feet and includes mixed open space and residential lands in the Berkeley Hills. The contributing area upstream of Lake Temescal is about 2.64 sq. mi. and includes the upper main stem of Temescal Creek (1.67 sq. mi.) and the Caldecott Tunnel branch (0.97 sq. mi.). Downstream of Lake Temescal, runoff from the other two upland subbasins, Vicente Branch (0.64 sq. mi.) and Claremont Creek (1.22 sq. mi.), combines with urban runoff within the densely developed lowlands of Berkeley and Emeryville. The mouth of Temescal Creek flows into San Francisco Bay about 0.4 mile north of the highway interchange leading to the Bay Bridge toll plaza, approximately 1,100 feet from the Site (ENTRIX, 2002).

A relatively small percentage of the main and tributary lengths of Temescal Creek still have earth-lined open channels with natural configuration. Those that remain are primarily within the Berkeley Hills. The lower 3.5 miles of the main stem and most of the tributary channel reaches are within engineered underground storm drain systems (ENTRIX, 2002).

2.3.4.2 "Old" Temescal Creek

In the vicinity of the Site, the surface channel of old Temescal Creek between Horton Street and the onsite railroad spur has been replaced by a relocated, underground culvert north of the Site and an open, engineered flood channel extending downstream (west) to Interstate 880. Old Temescal Creek (as part of the main flood channel) was abandoned following the 1968 construction of the flood control project.

The old channel persists as a topographic and drainage feature, although it no longer receives runoff from the upstream watershed. It crosses under Horton Street in two large concrete culverts and passes under the former Rifkin property in a concrete box culvert. Downstream of the former Rifkin property, a short section of the old constructed "U" shape channel exists (5 to 10 feet deep; 10 to 15 feet wide) with vertical banks supported by wood slats (ENTRIX, 2002). The location of the old channel is presented on Figure 2-2.

The old channel discharges through a 5-foot diameter culvert into the concrete-lined flood channel of the re-engineered Temescal Creek upstream of the railroad crossing. The old channel may receive surface flow from storm drains along Horton Street that appear connected, as well as local runoff from other nearby streets. Discharge of groundwater to the old channel was not observed during ENTRIX site visits (November 1998, November 2000, and December 2000) (ENTRIX, 2002). In addition, no flow was observed during CDM site visits in winter of 2006/2007.

2.3.4.3 Lower Temescal Flood Channel

Lower Temescal Creek from Horton Street to San Francisco Bay was constructed as an engineered flood control channel between 1964 and 1968 (ENTRIX, 2002). Within the Site vicinity, the only surface water contributions to the channel are the 5-foot diameter culvert from the old channel and a 21-inch diameter storm-water drain entering from the Sherwin-Williams property. No other storm drains have been observed within the Site vicinity.

Based on improvement plan design and as-built data, the flood control channel has a "U" shaped, concrete-lined cross section approximately 16 feet deep and 25 to 30 feet wide, with a long profile gradient of 0.00083 feet/feet (see Temescal Creek as presented on cross section K-K', Figure 5-3 of the ENTRIX RI, presented in Appendix A of this document) (ENTRIX, 2002).

The channel was excavated about five feet below the previously existing ground surface of old Temescal Creek, with side construction slopes of approximately 1 to 1. The area behind the vertical concrete walls and under the concrete bed was backfilled using filter material, crushed rock, gravel bedding, and reserved earthen materials.

The plans show a subdrain network was constructed under the channel, with pressure relief flap gates rising at intervals along the channel walls to minimize the risk of uplift, buckling, or shifting of the concrete liner. The subdrain network consists of 4-inch perforated pipe buried in the gravel bedding across the channel bed at relatively regular spacing (30 feet) that is connected by perforated pipes paralleling the channel left and right banks. Approximately every 90 to 120 feet along the channel length, vertical risers of 6-inch non-perforated pipe extend outside the channel walls to recessed openings in the concrete walls about two feet above the channel bed. Flap gates using 8-inch Waterman Drainage Gates (model F-10) were installed to allow one-way release of water from the subdrain system into the flood control channel when hydrostatic pressure is sufficient (hinges designed to require <1.0 foot of pressure head). The flap gates were not observed by ENTRIX in November 1998, November 2000, and December 2000) (ENTRIX, 2002).

The flap gates were observed by CDM during a visit in April 2005. The functionality of the flap gates has not been evaluated.

2.4 Previous Investigations, Risk Assessments, and Interim Remedial Actions

This section describes previous remedial investigations, nature and extent of COCs, fate and transport of COCs, groundwater modeling, risk assessments, and interim remedial actions.

2.4.1 Remedial Investigations

Soil, soil gas, and groundwater investigations have been conducted at the Site since 1988. The investigations have revealed that the COCs in the subsurface are metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and petroleum hydrocarbons. The investigations concluded that several COCs have migrated from the S-W property onto a portion of the former Rifkin property. Site soil and groundwater data through October 2000 is summarized in the 2002 ENTRIX Site RI report (ENTRIX, 2002). The RI report was approved by the Water Board on October 21, 2002 (Water Board, 2002).

Since October 2000, results from periodic groundwater monitoring events have been summarized in a series of reports. This document utilizes this groundwater data through the December 2007 event (LFR, 2008). In addition, several investigations have been conducted after October 2000 to complete characterization of the Site:

CDM, 2008b. Report of Findings, Soil Characterization Study Addendum, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. February 22, 2008.

CDM, 2007d. Report of Findings, Soil Characterization Study, The Sherwin-Williams Company, Emeryville, CA. Camp Dresser & McKee Inc., on behalf of The Sherwin-Williams Company. June 28, 2007.

CDM, 2007h. Data Summary Report for Soil Gas Investigation Activities, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. January 30, 2007.

CDM, 2007i. Data Summary Report for Installation and Sampling of Well CDM-1, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. January 30, 2007.

CDM, 2005. Report of Findings, December 2004 Subsurface Investigation, 1450 Sherwin Avenue, Emeryville, California. Camp Dresser & McKee Inc. March 2005.

CDM, 2002. Report of Findings, Subsurface Investigation, Former Rifkin Property, Emeryville, California. Camp Dresser & McKee Inc. December 2002.

The 2002 ENTRIX Site RI report concluded that the primary Site-related contaminants present in soil and groundwater beneath the Site include metals (primarily arsenic and lead), VOCs (primarily aromatic constituents and ketones), and petroleum hydrocarbons. Chlorinated constituents were also detected in groundwater samples collected throughout the Site, but in most instances appear to be related to past releases on adjacent properties and not attributable to S-W. Subsequent investigations have confirmed these conclusions.

Appendix A includes selected figures from the RI presenting the extent of impact from various COCs in shallow soil (0 – 3 feet bgs), deep soil (3 – 10 feet bgs), and groundwater (ENTRIX, 2002). In addition, Appendix A includes selected figures and tables from these subsequent subsurface investigations (CDM, 2002; CDM, 2005; CDM, 2007d; CDM, 2007h; CDM, 2007i; and, CDM, 2008b).

Appendix B includes selected figures and tables from the FS presenting summaries of arsenic, lead, total VOCs, and TPH concentrations in vadose zone and saturated zone soil samples across several depth intervals.

2.4.2 Nature and Extent of COCs

2.4.2.1 Metals

The extent of impacts from the release of metals (arsenic and lead) is limited to unsaturated, vadose zone soil, and the soil and groundwater within the Unit A aquifer. Aside from sporadic arsenic concentrations above its cleanup goal, metals have not been detected above cleanup goals in B-zone groundwater samples. Arsenic detected in A-zone groundwater at the Site does not appear to have significantly affected the B-zone groundwater (ENTRIX, 2002 and LFR, 2008). The highest concentration of arsenic detected in B-zone groundwater was 0.32 mg/L at well LF-B5 in April 1996; the latest arsenic concentration in this well was 0.0064 mg/L in October 2007. Arsenic concentrations in B-zone groundwater in 2007 ranged from less than 0.005 mg/L (at well LF-B3) to 0.054 mg/L (at well RP-BW-02).

The highest concentrations of the primary metal and COC at the Site, arsenic, in unsaturated soil were found in the central portion of the S-W property (within the

southern slurry wall area) and in the southern portion of the former Rifkin property (outside the slurry wall area). Arsenic was also detected at concentrations above its California Department of Public Health (CDPH) drinking water Maximum Contaminant Level (MCL) in A-zone groundwater extending from the central portion of the S-W property westward and also to the adjacent former Rifkin property. The extents of other metal COCs in the unsaturated soils and A-zone groundwater at the Site are within the extents of arsenic. In addition, a second area of arsenic in groundwater is present under the central portion of the former Rifkin property, originating from Horton Street (ENTRIX, 2002).

Groundwater monitoring events at the Site and a subsurface investigation on the former Rifkin property have been conducted since the completion of the 2002 ENTRIX Site RI report. The groundwater monitoring events have shown that the extraction wells EX-14, EX-15, and EX-16 on the former Rifkin property are capturing contaminants that have historically migrated from the S-W property (prior to installation of the slurry wall) and historically migrated from a release beneath Horton Street.

In September 2002, CDM conducted a subsurface investigation at the former Rifkin property to:

- characterize the presumed longitudinal axis of the arsenic A-zone groundwater plume on the former Rifkin property, originating from Horton Street;
- evaluate total arsenic in Unit A aquifer saturated soils under the portion of former Rifkin property to which arsenic may have migrated from the S-W property; and
- evaluate the soil-water partition coefficient (K_d) for arsenic.

During the September 2002 investigation (CDM, 2002), CDM collected saturated soil and grab groundwater samples from nine Unit A locations within the former Rifkin property (see figures presented in Appendix A). The results from the investigation yielded the following conclusions:

The Unit A aquifer arsenic plume in the central portion of the former Rifkin property, which originated from a release beneath Horton Street, has appeared to attenuate since the previous characterization of the plume in August 1998. During the August 1998 investigation, arsenic in Unit A aquifer groundwater was reported between 0.063 and 0.12 mg/L along the length of the plume. During the September 2002 investigation, arsenic concentrations ranged from 0.034 to 0.095 mg/L.

In December 2004, CDM conducted a subsurface investigation on the raised cap area and the area immediately west of the raised cap on the S-W property, and on an area of the former Rifkin property immediately adjacent to the S-W property, collectively defined as the study area (CDM, 2005). The objectives of the investigation were to:

- Characterize contaminants in the raised cap material to assess treatment and disposal options for the raised cap material, and

- Better define the horizontal and vertical extent of impacted unsaturated and Unit A aquifer saturated soils under and adjacent to the raised cap.

During the December 2004 investigation, CDM collected raised cap material, unsaturated soil, Unit A aquifer saturated soil, and Unit A aquifer grab groundwater samples from 38 locations within the study area (see figures presented in Appendix A). The results from the investigation yielded the following conclusions:

Unit A aquifer soil at the study area generally consists of clay with interbeds of well graded sand and gravel. The raised cap material consists of asphalt pavement over fill soil/bentonite from excavation of the slurry wall, concrete debris, and historic concrete foundations with rebar.

Arsenic is the predominant (highest concentrations and most widely distributed) metal COC in both unsaturated and Unit A aquifer saturated soils within the study area. The distribution of arsenic generally decreases with depth, with the highest at-depth concentrations detected in boring CDM-SB15, -SB16, and –SB18 (see figures presented in Appendix A). The investigation confirmed that the extent of other metals above cleanup goals in the unsaturated soils and Unit A aquifer saturated soils are within the extent of arsenic.

In the area west of the raised cap, arsenic concentrations in soil diminish to below 24 mg/kg above the A/B aquitard.

In November 2006, CDM installed a new Unit A aquifer well onsite (CDM-1) (see figures presented in Appendix A) in order to evaluate the extent of arsenic present in the areas outside of the southern portion of slurry wall (CDM, 2007i). Due to the presence of Building 35, the southern portion of the arsenic plume could not be contained within the slurry wall system. The groundwater samples from CDM-1 further delineate the lateral extent of the arsenic Unit A aquifer groundwater plume present outside and to the south of the slurry wall system, which are consistent with the results from Unit A aquifer wells LF-3 and LF-11.

2.4.2.2 Organic Compounds

VOCs were detected in Unit A soil and groundwater throughout the Site. In general, the highest concentrations of aromatic constituents (primarily ethylbenzene, toluene, and xylenes) and ketones (primarily acetone) were found in unsaturated soil: (1) along the former Rifkin property/S-W property boundary line (both inside and outside the slurry wall); and (2) in the north-central portion of the S-W property (inside the slurry wall).

In groundwater, the primary VOCs found in A-zone groundwater included: aromatic constituents (benzene, ethylbenzene, toluene, xylenes, and 1,2,4-trimethylbenzene); chlorinated constituents (1,2-dichloroethane (1,2-DCA), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-DCE, trichloroethene (TCE), and vinyl chloride); and ketones (acetone and 2-butanone). Of these VOCs, chlorinated constituents were not historically used at the S-W facility.

Aromatic VOCs (excluding benzene) were detected above their MCLs in A-zone groundwater in two primary areas of the Site: (1) both inside and outside the slurry wall, generally in the area west of Horton Street between former Building 29 and the southern portion of the former Rifkin property and (2) inside the slurry wall on the west-central portion of the S-W property, a former solvent tank farm location. Benzene was detected above its MCL in A-zone groundwater in three primary areas of the Site: (1) within the central area of the slurry wall under the current raised cap area, (2) adjacent to the slurry wall on the southern former Rifkin property and near former Building 35, and (3) along Horton Street at the central portion of the former Rifkin property. Ketones were primarily detected above their MCLs in A-zone groundwater on both sides of the slurry wall at the former Rifkin property and S-W property line.

The highest concentrations of chlorinated constituents were detected in A-zone groundwater in two primary areas of the Site: (1) in the south-central portion of the former Rifkin property and along Horton Street and (2) within the slurry wall near and north of Building 38. In B-zone groundwater, only 1,2-DCA was detected consistently above its MCL in groundwater samples from wells (and detected historically in groundwater samples from borings). The 1,2-DCA concentrations in B-zone groundwater are significantly higher than in A-zone groundwater beneath the S-W property, indicating an upgradient off-site release.

Petroleum hydrocarbons (quantified as both total petroleum hydrocarbon (TPH) in the diesel and gasoline ranges, but likely representing thinners and other raw materials) are present in soil and A-zone groundwater, located primarily (1) inside the boundary of the slurry wall, (2) in the southern part of the former Rifkin property at the boundary with the S-W property, and (3) along Horton Street near the northeastern portion of the former Rifkin property.

For TPH detected in groundwater at the S-W property and in the southern part of the former Rifkin property, TPH in the diesel range appears to represent mineral spirits and mixed oil compounds (rather than diesel fuel) and TPH in the gasoline range appears to represent the lighter fraction of oils (including mineral spirits) and individual VOCs (such as toluene and xylenes) that were detected in soil in these same areas.

The results from the December 2004 investigation (CDM, 2005) yielded the following conclusions concerning organic COCs in soil and groundwater:

- The highest VOC detections in soil at the study area were reported across the raised cap area, primarily from boreholes CDM-SB16, -SB17, -SB18, -SB23, -SB24, and -SB30. The highest detections were from toluene and xylenes.

- VOCs attenuate significantly between the raised cap area and the area to west of the raised cap.

- SVOCs, VOCs, and TPH detected on the former Rifkin property do not appear to be completely from releases on the S-W property.

The results from the November and December 2006 investigation (CDM, 2007h) yielded the following conclusions concerning organic COCs in soil gas:

- VOCs are present in soil gas at the Site, as previously inferred from vadose zone soil and shallow groundwater sample results. The southern portion of the former Rifkin property and the adjacent western portion of the raised cap area have the highest VOCs in soil gas concentrations.

- The presence of these VOCs in the subsurface may be attributed to historic releases of raw materials at the northwest corner of the raised cap area, historic operations by various businesses formerly present on the former Rifkin property, and historic releases on properties located upgradient of the Site and migration of impacted groundwater from these properties to the Site.

- The only VOC detected above its residential soil gas screening level on both the S-W and former Rifkin properties was benzene in 6 of the 9 samples considered representative of soil gas quality (see table and figure presented in Appendix A).

- In addition to benzene, 1,2-dichloroethane was detected above its residential soil gas screening level on the former Rifkin property.

- Methane in soil gas was detected in samples collected at both the S-W and former Rifkin properties. The methane at these areas is attributed to pervasive methanogenic conditions within the silt/clay zones, which is typical of the bay muds, and localized methanogenic conditions within underlying groundwater in sandy zones that have been impacted with organic compounds.

2.4.3 Conceptual Site Model

Pursuant to the NCP and associated California guidance documents, a conceptual site model (CSM) was prepared for the Site. The decision-making framework for Site investigations was developed based on the CSM. The CSM presents the primary and secondary sources of COCs and their release mechanisms to soil, soil gas and groundwater. The CSM was developed based on: known or suspected historical operations at the Site (see Section 2.2); investigation results (see Section 2.4.1 and Section 2.4.2); properties of the chemicals present; suspected chemical release mechanisms based on types of operations conducted and knowledge of where materials were handled; transport mechanisms; and potential exposure scenarios.

A narrative description of the CSM is presented below. The CSM description is based on a forensic evaluation of historical documents, chemical formulations and an understanding of the properties of the COCs and Site data. This CSM adequately describes the nature and distribution of COCs found at the Site. The development of the CSM and underlying arsenic in groundwater attenuation mechanisms at the Site, as discussed below, are consistent with recent publication from USEPA: Monitored

Natural Attenuation of Inorganic Contaminants in Ground Water, Volume 1, Technical Basis for Assessment, dated October 2007 (USEPA, 2007). Figure 2-7 presents an illustration of the CSM for the release and transport of arsenic.

2.4.3.1 Release Mechanisms

The primary release mechanism of COCs to the subsurface is suspected to have been through historic releases of raw and finished materials at the Site. The Site produced lead-arsenate pesticides, coatings, and resins through its history.

The lead-arsenate pesticide manufacturing was centered at the current northern area of the Raised Cap area (see Figure 2-2). The primary raw materials used to generate the lead-arsenate pesticides (where arsenic is in the +5 oxidation state, arsenic [+5]) were litharge (a lead oxide) and arsenic acid (H_3AsO_4, where arsenic is also present as arsenic [+5]). Based on review of historic plant building plans from the 1920s and historical photographs depicting operations, the pesticides appear to have been prepared through the following process:

1. Raw materials included litharge, acid (unknown variety, but most likely multiple types of acids were used) and either arsenic acid and/or raw material for production of arsenic acid (arsenic trioxide and acid, mostly likely nitric acid) were delivered to the Site via railcars and transferred to storage areas and/or containers including wooden vats and/or tanks.

2. Litharge was combined with an acid (unknown, mostly likely acetic acid) to generate lead liquor. The lead liquor was generated in an historic facility building described as a lead tower in which acid was sprayed over a litharge at the top of a tower and allowed to percolate downward through a series of trays. The liquor was collected at the bottom of the tower and likely contained both dissolved lead and lead complex solids.

3. If arsenic acid was generated at the facility, arsenic trioxide would have been combined with an acid to generate arsenic acid. This arsenic acid may have been generated in a historic facility building described as the arsenic acid plant.

4. The arsenic acid and lead liquor were combined in a set of parallel settling chambers where the lead-arsenate precipitate was collected.

5. The precipitate was dewatered in a filter press and further dried in ovens. The dried material was crushed and packaged as a lead-arsenate solid.

Potential release mechanisms for the lead, arsenic, and associated acids include the following:

- Loss to surface and rail ballast of raw materials from storage areas and/or containers during transfer and within the process system;
- Loss to surface of finished materials during packaging and handling (product appeared to be shipped in both wooden barrels and paper sack packaging); and
- Loss to surface of wastewater from settling chambers and presses.

In the above, loss to surface may have involved one or all of the following potential points: building floors, floor drains, floor sumps, and/or bare ground. The daily operations over 25 years could have resulted in thousands of gallons of materials permeating the floor of the manufacturing buildings or pavement, resulting in the presence of COCs in both soil and groundwater.

The primary raw materials used to generate coatings and resins were organic solvents, water-based solvents, oils, polyhydric alcohols, dibasic acids, and pigments. Storage of much of these materials was in aboveground storage tanks located at the northwest corner of the Raised Cap area and near the central portion of the current railroad spur (Figure 2-2). The primary potential release mechanism for these materials appears to have been losses to the ground surface during tank filling or discharge.

As a result of releases, the COCs were present on the ground and floor surfaces and in catchment areas (e.g., cement storage areas, bare ground, sumps, drains, etc). Further releases of COCs, addition of water/liquids (e.g., wash water) or in some cases infiltration (in outside areas that were not covered) caused movement of the COCs into the soils below the surface. In this unsaturated vadose zone, the materials were adsorbed and/or retained in the soil until further liquid releases or mobilization by infiltrating water or other liquids. Eventually some of the COCs (e.g., arsenic, lead, and organic compounds) reached the groundwater and migrated with the groundwater to downgradient areas.

2.4.3.2 Natural Attenuation of Metals

Arsenate trioxide suspected to have been released at the Site would have contained arsenic in its more mobile (arsenic [+3]) state. Arsenic acid and lead-arsenate pesticides released at the Site contained arsenic in its less mobile (arsenic [+5]) state. However, arsenic (+5) in groundwater migrating from the release areas would have been reduced to arsenic (+3) as it encountered more reducing conditions. The relative distribution of oxidizing/reducing conditions is consistent with the CSM. Upgradient groundwater entering the arsenic release areas is less reducing and the arsenic is found primarily in its arsenic (+5) state. However, in the central portion of the Site, due to the reducing conditions in A-zone groundwater caused by releases of organic COCs and naturally occurring organic matter, groundwater in these zones is mildly reducing and both forms of arsenic are found.

Arsenic concentrations in groundwater attenuate by three to four orders of magnitude between the release areas and the downgradient property boundary. Studies were conducted (CDM, 2008b and CDM, 2007d) to further characterize the phases of arsenic present in the subsurface and the mechanisms for its attenuation in groundwater. The findings from these studies indicate a direct relationship between phases and extent of arsenic with the lithology, as discussed below. Although the primary focus of these investigations was the release areas, results from locations outside and downgradient of the release areas also confirm this relationship.

Lead is not mobile in Site soil, as a result, lead has not migrated beyond the current Raised Cap area (Figure 2-2).

2.4.3.3 Arsenic Distribution in High Permeability Sandy Zones

An acidic, arsenic-bearing solution containing organic ligands such as acetate was released into the ground via spills, leaking tanks and pipelines, etc. The acid with organic ligands appears to have dissolved much of the clays and feldspars and chemically attacked the quartz within the aquifer. As the arsenic plume migrated deeper within the aquifer and downgradient (within the High Permeability Sandy Zones under both the Sherwin-Williams and former Rifkin properties), the dissolution reactions appear to have eventually neutralized the water when the solubility of the amorphous silica phase was exceeded, at which point the phase precipitated, forming a coating on the existing grains or cementing grains together. The organic ligands within the High Permeability Sandy Zones were then oxidized due to the introduction of oxygen-bearing precipitates (i.e., amorphous silica phases) into the High Permeability Sandy Zones.

Even after the releases of arsenic ceased, the arsenic plume continued to move farther downgradient, as the arsenic-bearing amorphous silica precipitate provided a continuing source of arsenic to groundwater moving through continuous sand lenses, i.e., along the connected active sand zone flow paths. These connected sand layers are depicted on cross section B-B' (see Figure 2-3 and 2-5). The investigations have confirmed that the sand zones under the release areas on Sherwin-Williams property and under a portion of the former Rifkin property downgradient of the release area contain residual solid-phase arsenic silica precipitates, which through dissolution continue to be a source of arsenic to groundwater. The sand zones that contain residual solid-phase arsenic silica precipitates largely occur within the area bounded by the green line on Figure 2-2; these sand zones and their extents are further discussed in the FS (CDM, 2009b).

Downgradient of the release areas, movement of the arsenic (both arsenite [+3] and arsenate [+5]) in the sand zones appears to be controlled by sorption to aquifer matrix, with arsenate being relatively less soluble and mobile. Investigations have confirmed that in groundwater samples collected from outside the slurry wall system, between the slurry wall and the UPRR lines and areas on the former Rifkin property downgradient of the S-W property, arsenic is more oxidized and reduction-oxidation (redox) conditions are not as reducing as near the release area (CDM, 2008b; CDM, 2007d; CDM, 2007i; CDM, 2005; CDM, 2003; and, CDM, 2002). In the more oxidized

environment downgradient of the release areas, the primary attenuation mechanism for arsenic in groundwater is sorption with, or co-precipitation as, oxyhydroxide compounds within the active sand zone flow paths. Adsorbed arsenic has been observed in samples collected from sandy zones at borings CDM-SB82 and –SB84, and –SB87, located downgradient of the arsenic release areas (CDM, 2008b).

Arsenic (arsenate and arsenite) sorbs to surfaces of a variety of aquifer materials, including iron oxides, aluminum oxides, and clay minerals. Adsorption of arsenate to iron-oxide surfaces is particularly important in reducing groundwater concentrations of arsenic because arsenate adsorbs strongly to iron-oxide surfaces in acidic and near-neutral-pH water. Investigations have also revealed relatively high concentrations of both dissolved iron and manganese in the regions downgradient of the release area which indicates potential for continued sorption of arsenic as iron and manganese oxidation/precipitation is on-going in downgradient, more oxidizing groundwater.

2.4.3.4 Arsenic Distribution in Low Permeability Silt/Clay Zones

The Low Permeability Silt/Clay Zones do not appear to have provided a migration pathway for the released arsenic acid solution plume due to lower hydraulic conductivity, but were subject to diffusion of the arsenic-containing water. Within the clay/silt zones, the organic ligands were isolated from oxidizing surface waters, and together with the natural organic carbon and sulfate in these layers provided conditions favorable for sulfate-reducing bacteria. The organic carbon and sulfate was initially deposited within bay muds and/or salt marsh deposits, which are characterized with hydrogen sulfide (H_2S), indicating the oxidation of organic carbon via sulfate reduction (EKI, 2008; EKI, 1999).

Under sulfate reducing conditions in the low iron/high sulfur environment within the silt/clay zones, which is typical of the bay muds, biological mediated reduction likely resulted in precipitation of orpiment and/or other arsenic sulfides such as realgar. Arsenic sulfides with arsenic to sulfur ratios similar to orpiment were observed in several soil samples analyzed from these silt/clay zones within the arsenic release areas and downgradient areas. Analysis of individual grains from the samples containing arsenic sulfide revealed the presence of arsenic and sulfur within the phases, but no other metals. In addition, oxygen was not present, indicating that the arsenic sulfides being generated within the silt/clay zones did not require the presence of dissolved metals in groundwater.

However, the formation and stability of arsenic sulfide precipitates under reducing conditions, has been described as "quite narrow for relatively high total concentrations of arsenic in groundwater, although site-specific conditions may support precipitation of sulfides" (USEPA, 2007). Yet, others have reported that the specific conditions within the San Francisco Bay margin are ideal for formation of arsenic sulfides where (1) the solubility of the sulfide mineral is exceeded and (2) the groundwater flow rates is slow compared to the arsenic sulfide precipitation rates (O'Day et al., 2004). Also, it is reported that under these conditions the precipitation of arsenic sulfide minerals is often biologically mediated, as certain bacteria (e.g.,

Desulfomaculum) are capable of reducing arsenic (+5) to arsenic (+3) and precipitating orpiment (O'Day et al., 2004).

In addition, under the reducing conditions, arsenic may also sorb onto pyrite, followed by formation of an iron/arsenic/sulfur -type phase, which subsequently converts to As_2S_3 (Bostick et al., 2004). In general, sorption reactions are very fast; on the order of seconds (Langmuir et al., 1985). The redox reaction required to convert sulfate to sulfide is typically slower (half life of minutes to hours). While the abiotic precipitation/dissolution reactions maybe the slowest, occurring on the order of weeks, biological-mediated sulfate-reduction reactions are reported to occur within minutes. Due to the relatively slow groundwater velocity in the low permeability silt/clay zones, there is adequate groundwater residence time for dissolved arsenic within these zones to form arsenic sulfides at the Site. Therefore, the formation of stable arsenic sulfides under the low velocity, high concentration conditions found at the Site is consistent with the findings of other studies of arsenic geochemistry within the San Francisco Bay margin (O'Day et al., 2004).

The bacterially-mediated reaction that forms arsenic sulfide is as follows (O'Day et al., 2004):

$$7CH_2O\ (s)[\text{organic matter}] + 3SO_4^{-2}\ (aq)[\text{from GW}] + 2H_3AsO_4^0\ (aq)\ [\text{from GW}] + 6\ H^+(aq)[\text{from GW}] \rightarrow As_2S_3\ (s)\ [\text{precipitated within the Low Permeability Silt/Clay Zones}] + 7CO_2(g) + 13H_2O(l)$$

The Site samples containing arsenic sulfide minerals had total arsenic concentrations as high as 8,000 mg/kg. However, arsenic sulfides are not a source of arsenic to groundwater at the Site, but a sink. This conclusion is based on the following:

- Under reducing conditions found within the Low Permeability Silt/Clay Zones arsenic sulfides are relatively insoluble, with solubility ranging from less than 0.0075 to 0.750 mg/L (Wilkin et al., 2003).

- The Low Permeability Silt/Clay Zones do not transmit groundwater as fast as the High Permeability Sandy Zones (i.e., the hydraulic conductivity of the Low Permeability Silt/Clay Zones is at least two orders of magnitude less than for the sandy zones).

2.4.3.5 Natural Attenuation Mechanisms for Arsenic

Natural attenuation of arsenic at the Site involves primarily precipitation and sorption. These processes have been influenced by biotransformation of arsenic, specifically arsenic redox cycling. Arsenic has been immobilized by sorption onto aquifer solids and by precipitation of solids incorporating arsenic as a major constituent. The investigations have confirmed that it is the relative ratio of the reactive iron to sulfur that controls the distribution of solid phases of arsenic. The partitioning and stability of the arsenic solids are affected by the redox conditions. Because of the differences in solubility of iron and arsenic sulfides, precipitation of arsenic sulfide is a controlling factor where sulfur predominates under reducing

conditions. Under oxidizing conditions, arsenic is removed from solution by adsorption to or co-precipitation with ferric oxyhydroxides.

The following summarizes the findings from investigations that demonstrate how the natural attenuation processes have been decreasing arsenic concentrations in groundwater downgradient of the release areas. These natural attenuation processes are expected to remain stable over the foreseeable future and are expected to continue decreasing arsenic concentrations in groundwater. This discussion follows the tiered format presented in the Monitored Natural Attenuation of Inorganic Contaminants in Ground Water, Volume 1, Technical Basis for Assessment (USEPA, 2007).

Tier I of the USEPA document calls for demonstration that the groundwater plume is stable and that sorption and/or precipitation onto aquifer solids is occurring where immobilization is the predominant attenuation process. Appendix A presents the findings from the Groundwater Monitoring Plan Assessment report (LFR, 2006). An analysis of the groundwater data reveals that concentrations of arsenic in groundwater have been attenuating over time and distance, within and outside the slurry wall system, from the release areas, with stable and/or decreasing concentrations at downgradient wells LF-11, LF-18, LF-20, LF-24, and LF-25, ranging from less than 0.005 to 0.260 mg/L since 1997 (LFR, 2008). Since its installation in November 2006, arsenic in groundwater concentrations appear to be increasing at well CDM-1, which is located on the S-W property along its boundary with the UPRR property, in an area outside of the slurry wall system. Unlike the other wells mentioned above, CDM-1 is screened in the upper portion of the A-zone; the others are screened across both the upper and lower portions of the A-zone. Appendix A presents a summary of 2007 arsenic concentrations and concentration trend analysis results at Site wells (LFR, 2008).

As presented in Section 2.4.3.3 and 2.4.3.4, the primary mechanisms for this attenuation are the precipitation of the arsenic into sulfide compounds and sorption of arsenic to the aquifer solids. A lesser degree of attenuation is observed outside the slurry wall system, specifically between wells LF-3 and CDM-1/LF-11, than inside the slurry wall system. The attenuation of the arsenic plume outside the slurry wall system, originating in the area around LF-3, is likely affected by historical release of organics in this area of the Site and potentially higher connectivity of sand zones between LF-3 and CDM-1 (CDM, 2007i).

Tier II includes determining the mechanism and rate of the attenuation processes. Given the relationship established between arsenic phases and lithology, one of the mechanisms is the precipitation of arsenic sulfide as groundwater moves from High Permeability Sandy Zones through Low Permeability Silt/Clay Zones. The reducing conditions and presence of sulfur in the Low Permeability Silt/Clay Zones has resulted in the precipitation of the arsenic into sulfide compounds.

Biologically mediated formation of sulfides is typically much faster than the abiotic rate (O'Day et al., 2004). However, even when using the abiotic half life of weeks, there is sufficient residence time within the Low Permeability Silt/Clay Zones for the

precipitation of arsenic sulfide to occur. The fact that the groundwater in contact with the Low Permeability Silt/Clay Zones, such as found in monitoring well LF-26, is in approximate equilibrium with orpiment (CDM, 2008b), confirms that the reaction rates are as fast or faster than the residence time of the groundwater as it passes from High Permeability Sandy Zones through Low Permeability Silt/Clay Zones and then back into High Permeability Sandy Zones.

The other mechanism is the adsorption of arsenic to aquifer matrix within the High Permeability Sandy Zones, and to a lesser extent adsorption of arsenic within the Lower Permeability Silt/Clay Zones. However, based on testing conducting to determine the composition of arsenic bound to soil, arsenic sulfide precipitation appears to be dominant process for the attenuation of arsenic (CDM, 2008b).

Tier III, as presented in the USEPA document, includes the determination of the capacity of the aquifer to attenuate the dissolved mass of contaminant within the plume and the stability of the immobilized contaminant to resist re-mobilization.

Arsenic Sulfide Precipitation

As presented in Section 2.4.3.3, precipitation of arsenic in silt/clay zones into arsenic sulfides was determined to be one of the primary mechanisms for the attenuation of the arsenic plume. The naturally-occurring sulfate concentrations within the Low Permeability Silt/Clay Zones, which is typical of the bay muds, are stable under existing conditions and would remain stable under the proposed remedial alternatives. Sulfate within the Low Permeability Silt/Clay Zones will continue to provide an energy source for the resident bacteria and sulfur source for arsenic precipitation.

In addition, changes in redox conditions could affect the re-mobilization of arsenic sulfide precipitate (e.g., orpiment), within the Low Permeability Silt/Clay Zones. At a pH of 6.75 S.U., such as those conditions observed in monitoring well LF-26 and other downgradient margins of the Site, increases in dissolved oxygen within the Low Permeability Silt/Clay Zones could have an impact on the solubility of orpiment.

However, it does not appear that there would be an adequate source of oxygen to oxidize the arsenic sulfide precipitates. Stoichiometrically, six moles of oxygen are required to oxidize one mole of orpiment, i.e., for every gram of dissolved oxygen increase in water, up to 0.78 gram of arsenic would be dissolved. Based on the stoichiometric oxidation of orpiment as follows:

$$As_2S_{3(s)} + 6O_2 \rightarrow 2As^{+3} + 3SO_4^{2-}$$

Due to competing reactions for dissolved oxygen in a groundwater system, considerably more oxygen would be needed to dissolve one mole of orpiment than is actually present in the system.

The potential for changes in redox conditions from addition of oxygen is limited to: 1) diffusion of oxygen at the groundwater surface; 2) infiltration of rainwater with dissolved oxygen; and 3) movement of groundwater from upgradient containing

dissolved oxygen. Based on Fickian diffusion, less than 1 kilogram of oxygen per year would diffuse from atmospheric oxygen through the groundwater surface to the Low Permeability Silt/Clay Zones at the Site. Infiltration of 30 percent of incident rainwater with a dissolved oxygen content of 8 mg/L would result in approximately 3 kilograms of oxygen per year to the subsurface. Based on a groundwater velocity of 0.5 feet per day and 3 mg/L of dissolved oxygen, the movement of groundwater through the Site would add approximately 9.3 kilograms of oxygen per year, resulting in a total addition of approximately 13.2 kilograms per year of oxygen to the Site.

An analysis of the organic content of the Low Permeability Silt/Clay Zones indicates that sufficient organic carbon is present to maintain reducing conditions and limit oxidation of the arsenic sulfide. Sampling has revealed organic carbon in Site saturated zone soil ranging from 385 mg/kg to 16,900 mg/kg, with an average concentration of approximately 3,200 mg/kg and a 95 percent UCL of the mean of approximately 5,100 mg/kg (ENTRIX, 2002). In the presence of sulfate, i.e., electron acceptor, the anaerobic bacteria will facilitate the formation of arsenic sulfides (i.e., orpiment). Therefore, reduction of sulfate in the presence of organic carbon can be expressed, excluding consideration of nutrients, as follows (Metcalf & Eddy, 1979):

$$6CH_2O + 3SO_4^{2-} \text{ (bacteria)} \rightarrow 6CO_2 + 3S^{2-} + 6H_2O$$

Where two moles of organic substrate (CH_2O) are consumed for each mole of sulfate reduced. Combining the oxidation reaction with reduction reaction, one mole of carbon is needed to reduce each mole of oxygen or approximately 0.375 grams of carbon are needed to reduce each gram of oxygen added to the subsurface.

Based on the estimated volume of low permeability material and an average organic carbon of 3,200 mg/kg, there is enough organic carbon present to maintain the sulfate-reducing conditions at the Site for the foreseeable future.

Therefore, given the transport dynamics of the aquifer and identified geochemical conditions, changes in redox conditions are not anticipated to affect the long-term stability of the arsenic sulfide at the Site.

Arsenic Sorption

As presented in Section 2.4.3.2, adsorption of arsenic in sandy zones was determined to be one of the primary mechanisms for the attenuation of the arsenic plume. The sorbed arsenic in the sandy zones, unlike the arsenic sulfide precipitates generated in silt/clay zones, is in equilibrium with arsenic groundwater concentrations, i.e., is a sink for arsenic rather than a source. The partitioning of arsenic onto aquifer solids is strongly affected by redox conditions, pH, and relative abundance of competing ions.

The soil-water partition coefficient (K_d) for arsenic in these zones expresses the relationship between the arsenic present in soil and groundwater. The K_d is affected by the redox conditions. The redox conditions in the more permeable sandy zones have been reducing due to the presence of elevated anthropogenic organic compounds, which has resulted in bacterial consumption of dissolved oxygen and other potential electron donors (sulfate, nitrate, etc.) (see Section 2.4.2.2). As these

organic compounds attenuate, redox conditions could become less reducing in the permeable sand zones. However, even under relatively low redox conditions, sorption of arsenic has been the primary attenuation mechanism in the areas downgradient of the release area.

As redox conditions become more oxidizing, a higher fraction of dissolved iron in groundwater will precipitate as amorphous iron hydroxides, increasing the opportunity for arsenic adsorption and/or co-precipitation with the iron hydroxides. The adsorption capacity of amorphous iron hydroxides has been measured at approximately 34,000 mg of arsenic per kg of iron hydroxide at a pH value of 7 (Pierce and Moore, 1982).

Therefore, given the transport dynamics of the aquifer and identified geochemical conditions, changes in redox conditions in the more permeable continuous sand zones (currently reducing and becoming more oxidizing in the long-term) should act to enhance the attenuation of dissolved arsenic in groundwater downgradient of the release areas.

2.4.3.6 Natural Attenuation of Organic Compounds

Concentrations of organic compounds in groundwater have also attenuated by several orders of magnitude between the release areas and the downgradient property boundary (LFR, 2008). The attenuation is due to several processes, including naturally occurring biodegradation. Remedial investigations and continued groundwater monitoring for organic COCs have demonstrated this attenuation (ENTRIX, 2002 and CDM, 2005). Concentrations of organic COCs from wells near the downgradient property boundary are below Site cleanup goals.

2.4.4 Risk Assessment

Gradient completed a human health risk assessment (HHRA) of the Site in February 2005. This risk assessment supplements the Current Conditions Risk Screen (CCRS), completed by EarthRisk in 2002. The CCRS evaluated the potential human and ecological exposures to Site COCs assuming existing conditions with the interim remedial measures (IRMs) in place (discussed below in Section 2.4.5). The CCRS concluded that VOCs potentially migrating to the surface and into the air do not present an ecological or human health concern with the IRMs in place, under current conditions.

Since the remediation of COCs at the Site is already anticipated, the final HHRA does not follow the format of a typical baseline HHRA, which would calculate risks assuming that no remediation would be done. Instead, the primary goal of the final HHRA was to develop risk-based target levels (RBTLs), for COCs in soil and groundwater using exposure scenarios that correspond with the anticipated future land uses of the Site. These risk-based remediation standards are intended to be protective of potential human receptors after redevelopment of the Site.

2.4.4.1 Identification of COCs

Based on an evaluation of the remedial investigations conducted, the Site HHRA identified 34 COCs in Site soil and/or groundwater (Gradient, 2005):

1,2,3-trichloropropane	ethylbenzene
1,2,4-trimethylbenzene	iron
1,2-dichloroethane	isophorone
1,2-dichloropropane	lead
1,3,5-trimethylbenzene	manganese
2-butanone	methyl isobutyl ketone
4-chloroaniline	methyl tert butyl ether
acetone	naphthalene
antimony	phenanthrene
arsenic	selenium
barium	silver
benzene	tetrachloroethene
benzo(a)anthracene	toluene
benzo(b)fluoranthene	trichloroethene
benzo(b,k)fluoranthene	vinyl chloride
cadmium	xylenes
chromium	zinc

However, this evaluation in the 2005 HHRA did not include the data set from the December 2004 investigation. The methodologies utilized in the HHRA were applied to the December 2004 investigation data set and five additional COCs in soil and/or groundwater were identified:

chloroform	n-nitrosodiphenylamine
copper	thallium
mercury	

This evaluation is summarized in Appendix C.

2.4.4.2 Exposure Pathways

Exposure pathways for COCs at the Site were evaluated in the HHRA to assess the potential impacts to human health. Based on the analysis presented in the HHRA, it has been concluded that potential human exposure to COCs is limited to soil and groundwater (Note: soil and groundwater includes potential volatilization of COCs and exposure to receptors through soil vapor intrusion pathway) and to the following eight types of potential current and future receptors at the Site:

1. Construction Worker
2. Utility Worker
3. Landscape Worker

4. Commercial Worker
5. Teenage Recreational Visitor
6. Resident on the Ground Floor of a Multifamily Dwelling
7. Resident on the Second Floor (or higher) of a Multifamily Dwelling
8. Resident in a Single Family Home (Unrestricted Residential Use Scenario)

Exposure pathways for COCs at the Site for potential impacts to the environment are comprised of migration of COCs in groundwater to aquatic receptors to the Lower Temescal Flood Channel and San Francisco Bay.

2.4.4.3 Exposure Scenarios

The potential exposure scenarios for the COCs were presented in the HHRA. The primary goal of the final HHRA was to develop RBTLs, for COCs in soil and groundwater using exposure scenarios that corresponded with the anticipated future land uses of the Site, including unrestricted residential use. These risk-based remediation standards are intended to be protective of potential human receptors after redevelopment of the Site. An RBTL is that concentration of a COC that poses no significant adverse health effect for individuals at a specified level of risk. An RBTL reflects exposure patterns for the various receptors expected to use portions of the Site. Thus, there are unique RBTLs for each of the eight potential human receptors, reflecting the manner in which each of these receptors would be exposed to soils and groundwater at the Site.

RBTLs were calculated for individual COCs with both a target risk of 10^{-6} and for a target non-cancer hazard of 1.0. RBTLs based on a target risk of 10^{-5} were also calculated because the arsenic RBTL calculated using a target risk of 10^{-6} resulted in a concentration less than the background arsenic concentration for San Francisco Bay area soils. Unique RBTLs were developed for each receptor consistent with anticipated future land use – residents, recreational visitors, commercial/retail workers, utility workers, landscape workers, and construction workers. A total of 23 combinations of human receptor-type and target risk were evaluated for soil and 18 combinations for groundwater. RBTLs are applicable to all areas of the Site where that particular receptor is selected as the basis of risk management and remediation decisions.

2.4.4.4 Vadose Zone Soil

In the HHRA, Gradient developed RBTLs for COCs in vadose zone soil, which apply to all portions of the Site. Table 2-1 presents these RBTLs for commercial worker and unrestricted resident receptors with a cancer risk target of 1.0E-06 and a non-cancer hazard quotient of 1.0. Leaching of COCs from soil to groundwater at the Site poses a potential threat to the beneficial uses of groundwater. The RBTLs for the soil COCs listed in Table 2-1 have been evaluated against concentrations that would be protective of Site groundwater through comparison with USEPA Region 9 PRGs

migration to groundwater using a dilution attenuation factor of 1.0 and USEPA Region 9 PRGs for tap water (Gradient, 2005).

2.4.4.5 Groundwater

In the HHRA, Gradient also developed RBTLs for COCs in groundwater. For a cancer risk target of 10^{-6} and a non-cancer hazard quotient of 1.0, the most conservative RBTL (i.e., lowest RBTL) are presented in Table 2-2.

2.4.5 Interim Remedial Measures

2.4.5.1 Previous Removal Actions

There have been two removal actions at the Site:

- Between 1973 and 1994, the solvent and oil tank farm and the lacquer plant were removed from the Site. This was primarily due to the conversion from oil-based to water-based paint products. Soils in the area of the solvent tank farm impacted with toluene and other solvents were removed and disposed off-site prior to 1990.

- Based on an investigation of soil samples collected adjacent to the S-W Site, in 1997, soils along Horton Street impacted with arsenic and lead were excavated and disposed off-site.

2.4.5.2 Other Remedial Measures

In the early 1990s, S-W implemented the IRMs under the oversight of the Water Board, recognizing the need to control off-site migration of groundwater and human exposure to soils prior to implementation of a final Site remedy. The IRMs consisted of:

- A soil-bentonite slurry wall and a cement-bentonite slurry wall to contain chemically affected areas and to control the migration of chemically affected groundwater at the Site to off-site areas

- An asphalt and concrete cap and storm water collection system to reduce infiltration of storm water runoff into chemically affected soils

- A groundwater extraction and treatment (GWET) system to pump groundwater from inside the slurry wall in an attempt to create an inward hydraulic gradient across the slurry wall and treat the groundwater

S-W started construction of the slurry wall in 1993. The slurry wall was completed in November 1994. Construction of the cap and storm water collection system occurred between March 1995 and September 1995. The GWET system was installed between June and September 1995 and began operation in October 1995. Details on the installation of the IRMs are provided in the Interim Remedial Measures Completion Report dated April 19, 1996 (LFR 1996).

Between 1997 and 1998, S-W upgraded the IRMs:

- In late 1997, a multipoint collection system was installed to isolate the storm water collection system from infiltration of groundwater
- In 1998, an additional groundwater extraction wells were installed for improving hydraulic control of affected groundwater.

In 1998, LFR conducted an evaluation of the Site IRMs (LFR, 1998). LFR concluded in its evaluation that:

- The IRMs have been moderately effective in controlling off-site migration of impacted groundwater, as they have not consistently maintained an inward hydraulic gradient across the slurry wall
- Frequent system shutdowns have hindered the effectiveness of the IRMs
- Human exposure to impacted soils has been reduced through the installation of the asphalt and concrete cap.

Since the 1998 LFR report, changes made to the GWET system have improved the ability to maintain an inward hydraulic gradient and have increased chemical mass removal. The changes recommended and implemented were:

- Installation and operation of additional groundwater extraction wells, increasing the extraction system well count inside the slurry wall from three to 10, and installation of three extraction wells on the former Rifkin property
- Modifications to the groundwater treatment system technology by replacing the electrochemical co-precipitation system for metal removal (and the biological system for organics removal) with a proprietary reductive precipitation technology and activated coconut-shell based carbon

In 2006, CDM conducted an evaluation of the IRMs (CDM, 2006a). CDM concluded that the slurry wall layout was necessarily constrained by property boundaries to the north, east, and west, and most notably constrained to the south by the footprint of the plant's primary warehousing, production and shipping facility (i.e., Building 35). These physical constraints limited the effectiveness of the slurry wall to fully contain affected groundwater as demonstrated below:

- Soil and groundwater data indicate that prior to the IRMs, arsenic migration occurred northward from the S-W property, onto the former Rifkin property.
- Soil and groundwater data indicate that prior to the IRMs, arsenic migration occurred to the northwest and downgradient from the S-W property, onto the Union Pacific Railroad Emeryville Yard and active main line tracks.

- Soil and groundwater data indicate arsenic migration occurred along or under the northern portion of Building 35, outside of the slurry wall installation, in an area where plant operations limited the access for construction of the slurry wall.

- In general, the slurry wall is an effective barrier to migration of groundwater, as demonstrated by the differential groundwater gradients measured across piezometer/well pairs inside and outside the slurry wall; however, there are known weak points in the wall where utilities and other features penetrate the well and seasonal variations in the gradient direction across the slurry wall near Temescal Creek.

- The spur track within the slurry wall layout is a conduit for storm water infiltration.

- The groundwater extraction system is controlling groundwater elevations within the slurry wall layout. However, maintenance of an inward hydraulic gradient is strongly influenced by the proximity of extraction wells to the wall, the spur track, and the areas of the wall in relation to the northwesterly hydraulic gradient.

- The groundwater treatment system requires extensive operational and maintenance efforts, but has been and is effective at treating influent concentrations to comply with permitted discharge limits.

2.5 Summary of Treatability Study Findings

The CSM was used to assess the adequacy of the Site characterization for evaluation of appropriate response actions, and identify whether more information (i.e., data gap assessment) is required to evaluate possible treatment technologies under these response actions. This data gap assessment revealed additional information was required to evaluate retained groundwater and soil treatment technologies. The proposed methods for filling these data gaps were presented in the *Treatability Study Work Plan* (CDM, 2006b) and subsequent addenda (CDM, 2006a; CDM, 2007f; CDM, 2007e; and CDM, 2007a). The findings from the treatability studies, with respect to groundwater and soil, are summarized below.

2.5.1 In Situ Groundwater Treatment

The data gap analysis revealed the need for additional information to adequately evaluate the potential effectiveness of two in situ groundwater remedial technologies; a passive process and an active process. These two processes are described below.

- **Passive Process**: Use of natural or engineered materials can function to remove arsenic from groundwater via processes including physical adsorption, chemical precipitation, and biological precipitation. Various materials are commercially available and have various capacities for adsorption of arsenic(+3) and arsenic(+5). Some materials are also capable of oxidation of arsenic(+3) to arsenic(+5) which can be more strongly adsorbed to these materials.

Groundwater would passively flow through materials placed in the saturated zone and arsenic would be adsorbed. The materials may need to be periodically replaced if their capacity is exhausted or to maintain effective permeability through the media. Given appropriate oxidation-reduction conditions (either naturally occurring or induced), iron-rich materials can promote arsenic co-precipitation with ferric iron oxyhydroxides. Another passive in situ groundwater treatment option is based on biological production of sulfide that can precipitate arsenic. In this option, in-ground biological reactions could be induced via introduction of a slow release biodegradable electron donor and sulfur to produce sulfide. Upon contact with arsenic-containing groundwater, the sulfide would react with arsenic to generate an arsenic sulfide and precipitate the arsenic from the groundwater. The slow release electron donor and sulfur source may need to be periodically replaced and/or the precipitate periodically removed to maintain effective permeability.

- **Active Process**: Arsenic in groundwater can be treated using an active in situ treatment option via air sparging combined with iron addition to promote arsenic co-precipitation with or adsorption onto formed ferric iron oxyhydroxides. Preliminary laboratory studies were conducted by CDM to evaluate the potential for ferrous iron addition and air sparging for arsenic removal from Site groundwater (CDM, 2005). These studies were successful. However, additional data are needed to supplement the initial findings.

The evaluation of these options was conducted in a phased approach (i.e., Phase I - laboratory screening, Phase II - bench-scale-testing, and Phase III - pilot-scale testing).

2.5.1.1 Phase I Testing

As presented in the *Emeryville Facility Groundwater Treatability Study for Laboratory Screening Studies* (CDM, 2007f), materials selected for treatability testing as passive in situ groundwater treatment options included the following:

- Granular ferric hydroxide (e.g., US Filter GFH and Severn Trent Bayoxide E33)
- Taconite iron ore
- Blast furnace slag
- Steel furnace slag
- Zero-valent iron
- Anaerobic biological process option using slow release electron donor and sulfur source (e.g., Regenesis MRC™)

Granular ferric hydroxide, taconite iron ore, blast furnace slag, and steel furnace slag were tested for their effectiveness as arsenic adsorbents (adsorptive media). Zero-valent iron (ZVI) was evaluated for its effectiveness as a reductant and/or adsorbent for arsenic. The anaerobic biological process option was evaluated as a passive system to precipitate arsenic.

Two active in situ arsenic groundwater process options selected for treatability study testing are:

- Ferrous chloride addition and aeration with optional polymer addition
- Ferrous chloride addition and hydrogen peroxide addition

The addition of ferrous chloride addition and aeration of groundwater results in the formation of fresh ferric oxyhydroxides, which are effective for arsenic adsorption. Aeration functions to promote biodegradation of organic contaminants in groundwater and other biodegradable organic carbon, which impacts whether the formed ferric oxyhydroxide arsenic co-precipitates remain in an oxidized and solid-phase state. Polymer addition to this process facilitates larger floc formation, which is important for settling and/or filtration of solids from groundwater. Hydrogen peroxide can also be used to oxidize added ferrous iron to ferric oxides that can co-precipitate or adsorb arsenic

Conclusions of Laboratory Testing

Passive Adsorption

Analytical results showed that adsorptive media, GFH and Bayoxide E33 in particular, had the greatest arsenic removals; followed by ZVI, taconite iron ore, steel furnace slag, and blast furnace slag. GFH, Bayoxide E33, and ZVI were successful in reducing arsenic concentrations to less than 0.010 mg/L.

GFH, Bayoxide E33, and taconite iron ore resulted in the lowest final dissolved iron concentrations, followed by steel furnace slag and blast furnace slag. ZVI resulted in the highest dissolved iron concentrations. An advantage of dissolved iron generation in a field application is that it can migrate downgradient and eventually become oxidized and adsorb or co-precipitate additional arsenic. A disadvantage of elevated dissolved iron is that is can precipitate and potentially cause aquifer plugging. These passive adsorption tests were only conducted for 48 hours. Over a longer period of time, anaerobic microbial activity by iron-reducing bacteria may also lead to reduction of GFH and Bayoxide E33 and possibly taconite iron ore and result in generation of greater amounts of dissolved ferrous iron.

The higher doses of media resulted in greater reductions of dissolved arsenic when compared to the respective lower dose tests. However, both low and high doses of the media resulted in greater than 50 percent arsenic removal, the performance metric for this Phase I study.

Active Precipitation

Arsenic concentrations were reduced by more than 50 percent in tests using groundwater from LF-10 and MW-5 and the active precipitation process. Arsenic concentrations were reduced to less than 0.010 mg/L with LF-10 groundwater. Greater arsenic removal in MW-5 groundwater tests would likely have occurred if buffer was added to control pH reduction. Reduction of dissolved arsenic

concentrations in LF-10 groundwater to less than 0.010 mg/L required addition of 300 mg/L iron. This iron addition rate resulted in generation of 600 to 700 mg/L TSS.

Oxidative Precipitation

Use of iron-containing materials in the presence or absence of a reducing agent (i.e., dithionite) resulted in maximum generation of about 3 mg/L of dissolved iron after about 5 weeks of incubation. This concentration of dissolved iron was less than 10 percent of the baseline dissolved iron concentration in groundwater from LF-10 and did not significantly contribute to arsenic removal. Hydrogen peroxide addition did promote arsenic removal from LF-10 groundwater because it oxidized ambient dissolved iron. Hydrogen peroxide resulted in minor reduction of TOC and COD in LF-10 groundwater.

Biological Reduction

The biological process for arsenic removal was ineffective with groundwater from EX-8, removing more than 50 percent arsenic in some but not all of the tests. However, arsenic removal was also greater than 50 percent in the absence of added MRC™, indicating that arsenic removal was predominately attributable to factors other than MRC addition.

2.5.1.2 Phase II Testing

In Phase II testing, as outlined in the *Treatability Study Report for Phase II In Situ Groundwater Treatment - Groundwater Column Studies* (CDM, 2007a), bench-scale column studies were conducted on several media combinations to determine their suitability for use in treatment of contaminated groundwater at the Site. The groundwater used in this study was extracted from two wells, LF-10 and CDM-1 at the Site (see figures presented in Appendix A).

Column packing materials were selected based on results from Phase I of the treatability study. In Phase II of the treatability study, five packing materials were studied. The materials used and rationale behind their selection are described below:

- 20% zero valent iron (ZVI), 20% organic compost, 20% gypsum, 40% sand (columns 1, 6, 11, and 16) – This mixture was designed to reduce the quantity of ZVI tested (and thus the full-scale cost) and to provide a source of sulfate (i.e., gypsum) and electron donor (i.e., compost) to promote biogeochemical reduction of sulfate to sulfide and effective arsenic removal. One potential risk from the mixture was the potential for the formation of hydrogen sulfide. ZVI usually precipitates sulfide, but this risk was evaluated during the study.

- 20% ZVI, 20% organic compost, 60% sand (columns 2, 7, 12, and 17) – This mixture was similar to the previous mix but replaces the gypsum with sand. This mixture would not benefit from any positive attributes of the gypsum, but it also would not carry the risk of hydrogen sulfide formation.

- 20% ZVI, 80% taconite (columns 3, 8, 13, and 18) – This mixture was intended to test the potentially synergistic effects of ZVI and taconite while reducing cost compared to pure ZVI. Both materials were effective in the Phase I test. The first batch of taconite procured for the study contained an excessive level of fine particles not consistent with the particle size distribution of ZVI. Only material retained in a #20 sieve was used in the TS. The second batch of taconite used for the study was pre-sieved off-site using the same sieve size.

- 100% Taconite (columns 4, 9, 14, and 19) – This test was intended to further evaluate this material. As noted above, only material retained in a #20 sieve was used in the TS.

- 20% ZVI, 80% sand (columns 5, 10, 15, and 20) – This test was intended to further evaluation of ZVI, but at a lower volumetric fraction to reduce the cost of the mixture.

- 100% Sand (columns 21, and later, 22) – These columns were used as controls to determine any positive or negative effects of the testing configuration that are independent of the packing material.

Testing Setup

Columns 1 through 10 were operated with groundwater from well LF-10 and Columns 11 through 22 were operated with groundwater from well CDM-1. Columns 1 through 5 and 11 through 15 were designed to operate at a hydraulic residence time of approximately 1 day. Columns 6 through 10 and 16 through 21 were designed to operate at a hydraulic residence time of approximately 7 days. Samples were taken from the sampling port installed at the inlet and outlet of the columns.

Conclusions

- All columns with mixtures of 20% ZVI and 80% sand produced effluent with non-detect levels of arsenic for the first month of operation (approximately 50 pore volumes).

- One column with the mixture of ZVI, sand, gypsum and compost, demonstrated arsenic breakthrough above 0.036 mg/L after approximately 50 pore volumes of water from the more contaminated well (CDM-1).

- One column with the mixture of ZVI, sand, and compost, demonstrated arsenic breakthrough above 0.036 mg/L after approximately 50 pore volumes of water from the more contaminated well (CDM-1). A duplicate of this column and other columns with this material and less arsenic loading did not break through.

- All columns containing taconite or taconite mixtures except one demonstrated arsenic breakthrough. One column had arsenic breakthrough at levels below 0.036 mg/L, but the remainder had effluent arsenic concentrations above 0.036 mg/L with less than 1 pore volume of total flow.

Constant head tests indicated that columns filled with 100% taconite had the highest permeability constant, 1.44 centimeters/second (cm/s), while columns containing gypsum had the lowest observed permeability on average (0.011 cm/s). The sand control column had higher permeability as expected (0.96 cm/s). The addition of ZVI and/or compost to sand also reduced its permeability, although not as significantly as the gypsum.

Based on these data collected during the first month, the best-performing material or mix of materials to date is the 20% ZVI and 80% sand mixture. Dilution of this mixture with additional compost or compost and gypsum in place of sand did not provide any measurable benefit with respect to arsenic removal during this first month.

In addition, the Phase II testing results, along with an economic analysis, concluded that an active in situ treatment process may be as cost-effective for in situ treatment of arsenic in groundwater as the tested passive treatment process materials and that an active treatment process involving precipitation should be carried forward into Phase III testing.

2.5.1.3 Phase III Testing

Phase III testing of the passive treatment process, as outlined in the *Treatability Study Report for Phase III In Situ Groundwater Treatment - Groundwater Column Studies* (CDM, 2008c), involved long-term operation of select Phase II testing columns, primarily those with ZVI, sand, and/or compost mixtures, for potential remedial design evaluation.

The Phase III testing of the active treatment process tested a precipitation, coagulation, and flocculation process for either an in situ or ex situ treatment system. In the Phase III testing system, groundwater entered the first stage of the active treatment where iron in the form of ferric chloride or ferrous sulfate was mixed in the groundwater. Air sparging to promote mixing and oxidation of iron and arsenic was also be introduced in stage one. This oxidation step results in iron precipitation and subsequent arsenic precipitation. Polymer, also injected in the first stage of the process, was injected to help the iron oxides form a flocculate to aide in precipitation. The groundwater was then discharged into the second stage of the active treatment, which was designed to provide sufficient residence time for the flocculent to settle out of the groundwater. The final stage, stage 3, provided additional settling for carry over of particulate from stage 2.

In an in situ active treatment system, the treatment stages would be achieved through a series of concrete vaults placed within each of three breaches in the existing slurry wall. Flow through the vaults would be driven by the hydraulic gradient. The aboveground active treatment system would pump groundwater through above ground tanks and clarifiers comprising the 3 treatment stages and into Temescal Creek. An additional option for either active treatment system that was tested was the addition of permanganate in the first stage to break potential arsenic-organic complexes and reduce sludge production.

Conclusions

- One column with the mixture of ZVI, compost, and sand removed high concentrations of arsenic from well CDM-1 groundwater to nondetectable concentrations for approximately 110 pore volumes. However, a duplicate of this column demonstrated arsenic breakthrough above 0.036 mg/L after approximately 45 pore volumes of water.

- Columns with mixtures of sand and ZVI remove arsenic from well CDM-1 groundwater to less than 0.036 mg/L for approximately 50 pore volumes.

- When subjected to the lower concentrations of arsenic from LF-10, both the ZVI/sand and ZVI/sand/compost mixtures continue to remove arsenic to below detection limits for the duration of the study and at least 175 pore volumes of groundwater.

- A larger 6-inch column filled with the ZVI/sand mixture demonstrated similar performance to the corresponding 3-inch column with respect to potential number of pore volumes that could be treated.

- An active process can effectively precipitate arsenic from groundwater extracted from wells CDM-1 and LF-10. Consistent reduction in dissolved concentrations below the 0.036 mg/L threshold was accomplished.

- In the active process, total concentrations were reduced below 0.10 mg/L, but not 0.036 mg/L. It is expected that additional optimizations in chemical dosage and the proportionally larger settling basins that would be used in a full scale system would be sufficient to reduce total concentrations below the 0.036 mg/L threshold consistently.

- In the active process, the optimal chemical doses for treatment of groundwater from LF-10 were approximately 20 mg/L of ferric chloride and 0.078 mg/L of organic polymer. The optimal chemical doses for treatment at CDM-1 were 59 mg/L of ferric chloride, 37 mg/L of sodium hydroxide, 2.6 mg/L of potassium permanganate, and 0.053 mg/L of organic polymer.

With respect to long-term arsenic removal with a PRB process option, the ZVI/compost/sand and ZVI/sand mixtures performed best at the conclusion of Phase III testing. For the purposes of conceptual remediation design within the FS evaluation, the 20% ZVI and 80% sand mixture, with a conservative number of 50 pore volumes of groundwater treatment prior to arsenic breakthrough, will be used as the basis for a PRB process option.

2.5.2 In Situ Soil Treatment

The data gap analysis revealed the need for additional information to adequately evaluate the potential effectiveness of two soil remedial technologies: grout injection and soil mixing. Under both of these in situ soil treatment options, the primary

objective for reducing the mobility of arsenic is decreasing the permeability of the targeted soil mass.

2.5.2.1 Grout Injection

Grout injection can be used to improve soil strength and reduce permeability of targeted soils via injection of grout into the soil through driven probes at low to moderate pressures to permeate the voids. This is accomplished without significantly changing the soil's structure or volume. Effectiveness of this technique is dependent upon the volume or percentage of voids that can be penetrated by the grout mixture. Grout mixture design and proper spacing of the injection points are critical to the effectiveness of the treatment technique.

The grout injection treatability study (CDM, 2007b) followed the procedures outlined below:

1. Pre-grout injection aquifer testing, including installation of an extraction well and two piezometers in the test area.

2. Abandonment of the extraction well and two piezometers in the test area.

3. Grout injection.

4. Post-grout injection aquifer testing, including installation of a new set of one extraction well and two piezometers in the test area.

Grout injection testing consisted of 25 grout injection points in a 5 by 5 grid, within an area approximately 12 feet by 12 feet (plus one additional point outside of this grid). This spacing pattern was selected after a review of the pre-injection aquifer testing results which yielded a higher than expected net aquifer permeability.

The original grout injection treatability plan called for Ultrafine cement in a 3:1 to 5:1 by weight to water grout mixture to be injected at all 25 grout locations. However, due to the lithologies encountered during the installation of the pre-grout injection extraction well and piezometers and the pre-injection aquifer testing results, Type III cement was hypothesized to be potentially suitable in a grout mixture for injection. Therefore, Type III cement was substituted for Ultrafine cement at two grout injection locations.

Results

In summary, the grout injection had a distinct affect on aquifer hydraulics. Using the pre-grout pumping rate of approximately 1 gallon per minute (gpm), the post-grout draw down was so rapid in the pumping well that the extraction lasted only 23 minutes in the May 2007 and only 19 minutes in the July 2007 testing. During pre-grout injection aquifer testing conducted in February 2007, significant draw down of the well was not achieved over an 8-hour pumping period.

However, grout injection only achieved an overall permeability reduction to 10^{-5} cm/sec, which was less than the data quality objective of 10^{-7} cm/sec. In addition, grout injection was accompanied with temporary fluctuations of pH, which may contribute to a release of arsenic into groundwater from the sandy lithologies (i.e., source material for arsenic to groundwater).

2.5.2.2 Soil Mixing

The practice of mixing soil with various reagents, such as cement, lime, and bentonite, has been used in the United States since the mid 1930s. Early applications were used for improving the engineering properties of soil for civil construction projects, including road and dam construction. Current soil mixing techniques involve construction of overlapping piles by injecting cement mixed grout from the tip of a drill rig's auger into the soil.

A bench-scale study for assessing the effectiveness of soil mixing for reducing soil permeability was conducted (CDM, 2007g). The testing included seventeen (17) potential grout mixes with various proportions of potable water, Site groundwater, cement, bentonite and a cement plasticizer. This was performed not only to test a variety of potential cement and bentonite mixes but also to determine whether Site soil and/or groundwater had any adverse effects on the slurry. Nine (9) grout mixes were composed of 100 percent potable water, bentonite content of 2 or 4 percent, cement ranging from 10 to 30 percent and 0 to .3 percent of a cement plasticizer. Eight (8) grout mixes were composed of 50 percent potable water and 50 percent Site water with the same percentage of bentonite, cement and cement plasticizer.

Based on this testing, two grout mixes were selected for permeability testing. The selected grout mixes consisted of a 1:2 grout soil ratio with 4% bentonite, 20% cement and 0.2 cement plasticizer. One mix was composed a 100% potable water and other mix was composed 50% potable water and 50% Site groundwater. Additionally, two samples were prepared at a 1:4 grout to soil ratio, both having 40 percent cement and 0.4 percent cement plasticizer at a 100 percent potable water and a 50-50 potable/groundwater and no bentonite. The second set of samples was tested to evaluate how bentonite affects the hydraulic conductivity of the soil.

Hydraulic conductivity testing was performed on these samples. Test results showed that samples mixed with bentonite achieved lower hydraulic conductivities than samples that did not have bentonite. Soil-grout mixtures exhibited hydraulic conductivities of 10^{-7} cm/sec.

Long-term hydraulic conductivity testing was performed on these soil-grout samples. Testing was conducted over 76 days and readings were recorded every two to four days. Long-term permeability is lower than short-term permeability and range from 4.6×10^{-8} to 7.3×10^{-9} cm/sec.

In both cases the soil-grout mixes with bentonite had a lower hydraulic conductivity than the sample without bentonite. The hydraulic conductivity was not affected by the water conditions.

Results

The bench-scale studies demonstrated that soil mixing can achieve a reduction in permeability of less than 10^{-7} cm/sec. While soil mixing caused an increase in pH due to the bentonite and cement in the mix, this was offset by actual mixing of the sandy lithologies containing the amorphous silica phase with more reducing sandy clay and clay material,. Analyses of both potable and Site groundwater run though the bench-scale mixes showed no increase in arsenic concentration in the leachate.

In support of including soil mixing within potential remedial action alternatives based solely on the favorable results from the scale testing, CDM presented DTSC with a memorandum (CDM, 2008a) presenting an overview of soil mixing technology, including:

- History and use of soil mixing,
- Its use as the industry standard for improving soil characteristics and for environmental remediation,
- Recognition and acceptance of soil mixing by regulatory agencies, and
- Soil mixing design and construction procedures, including effectiveness bench testing for design and implementation sequence (consistent with the standard of practice in the industry).

Table 2-1
RBTLs for COCs in Vadose Zone Soil
Sherwin-Williams Emeryville Remedial Action Plan

	RBTL (mg/kg)	
	Commercial Worker	***Unrestricted Resident***
Volatile Organic Compounds		
ACETONE	1800000	70000
BENZENE	0.076	0.015
4-CHLOROANILINE	8200	310
ETHYLBENZENE	200000	7800
TETRACHLOROETHENE	0.32	0.063
TOLUENE	440	100
XYLENES	11000	2300
Semivolatile Organic Compounds		
BENZO(A)ANTHRACENE	9.5	1.1
BENZO(B)FLUORANTHENE	9.5	1.1
BENZO(B,K)FLUORANTHENE	9.5	1.1
NAPHTHALENE	41000	1300
PHENANTHRENE	160000	4500
Inorganic Compounds		
ANTIMONY	820	31
ARSENIC	24 (1)	24 (1)
BARIUM	140000	5500
CADMIUM	15	3.1
CHROMIUM (+3)	3100000	120000
CHROMIUM (+6)	41000	1600
LEAD	5600	250
SELENIUM	10000	390
ZINC	610000	23000

Notes:
RBTL - Risk Based Threshold Level
COC - Chemical of Concern
mg/kg - milligram per kilogram
(1) - The RBTL for arsenic in soil is the naturally occurring background concentration, as presented in Human Health Risk Assessment.

CDM

Table 2-2
RBTLs for COCs in Groundwater
Sherwin-Williams Emeryville Remedial Action Plan

	RBTL (mg/L)
Volatile Organic Compounds	
ACETONE	34000
BENZENE	0.046
2-BUTANONE	94
1,2-DICHLOROETHANE	0.35
1,2-DICHLOROPROPANE	0.52
ETHYLBENZENE	35
METHYL ISOBUTYL KETONE	27000
METHYL TERT BUTYL ETHER	0.66
TOLUENE	1100
TRICHLOROETHENE	6.6
1,2,3-TRICHLOROPROPANE	0.036
1,3,5-TRIMETHYLBENZENE	0.46
1,2,4-TRIMETHYLBENZENE	0.14
VINYL CHLORIDE	0.004
XYLENES	64
Semivolatile Organic Compounds	
NAPHTHALENE	7.3
Inorganic Compounds	
ARSENIC	0.8
IRON	5100
MANGANESE	2400
ZINC	8500

Notes:
RBTL - Risk Based Threshold Level from Human Health Risk Assessment
COC - Chemical of Concern
mg/L - milligram per liter

CDM



Figure 2-1
Site Location Map
Sherwin-Williams Company
Emeryville, California

W:\REPORTS\Sherwin-Williams\Emeryville\Feasibility Study\Graphics\Site Location Map Fig 2-1.ai 03/31/09 JJT

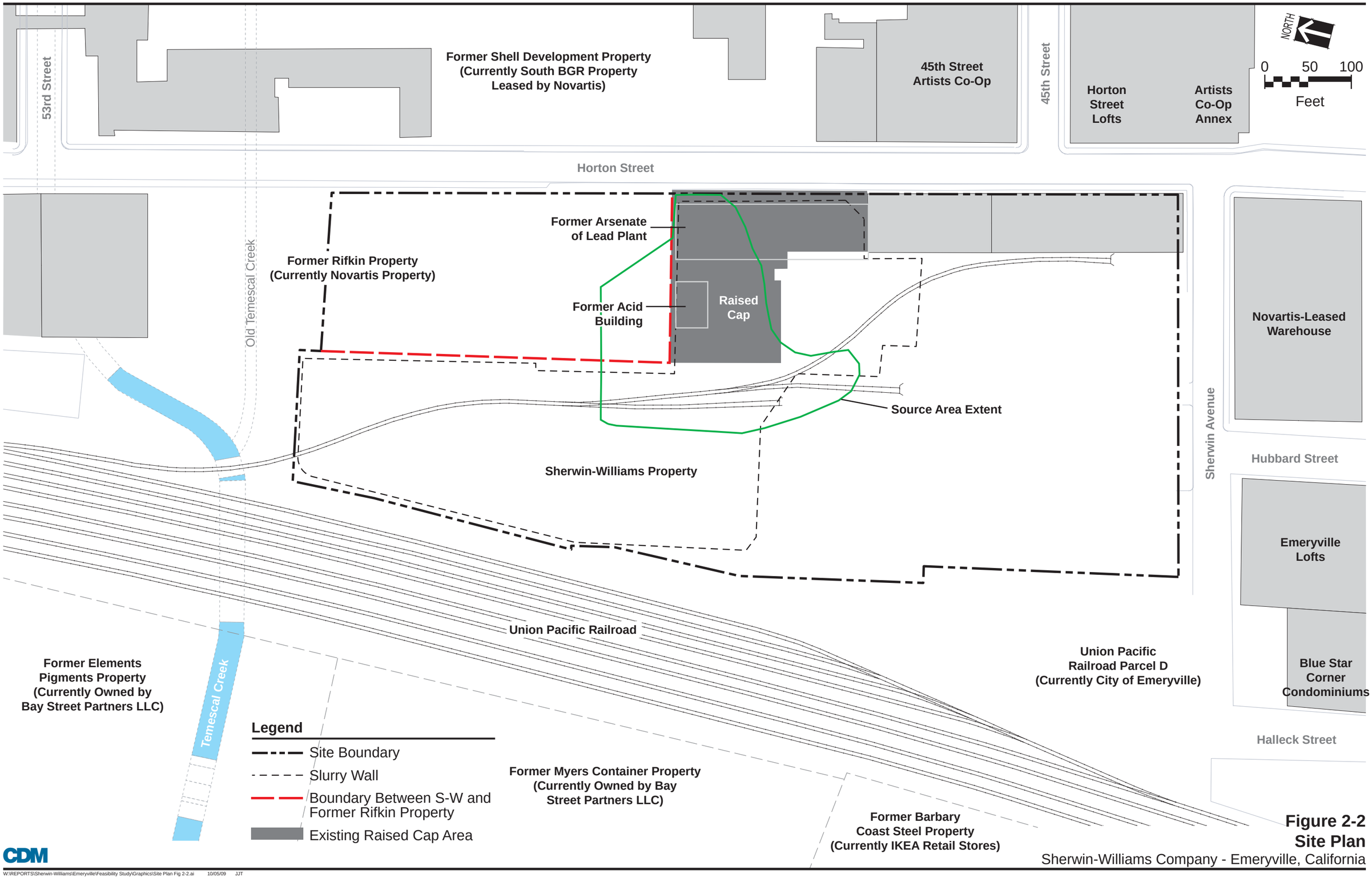


Figure 2-2
Site Plan
Sherwin-Williams Company - Emeryville, California

CDM

W:\REPORTS\Sherwin-Williams\Emeryville\Feasibility Study\Graphics\Site Plan Fig 2-2.ai 10/05/09 JJT

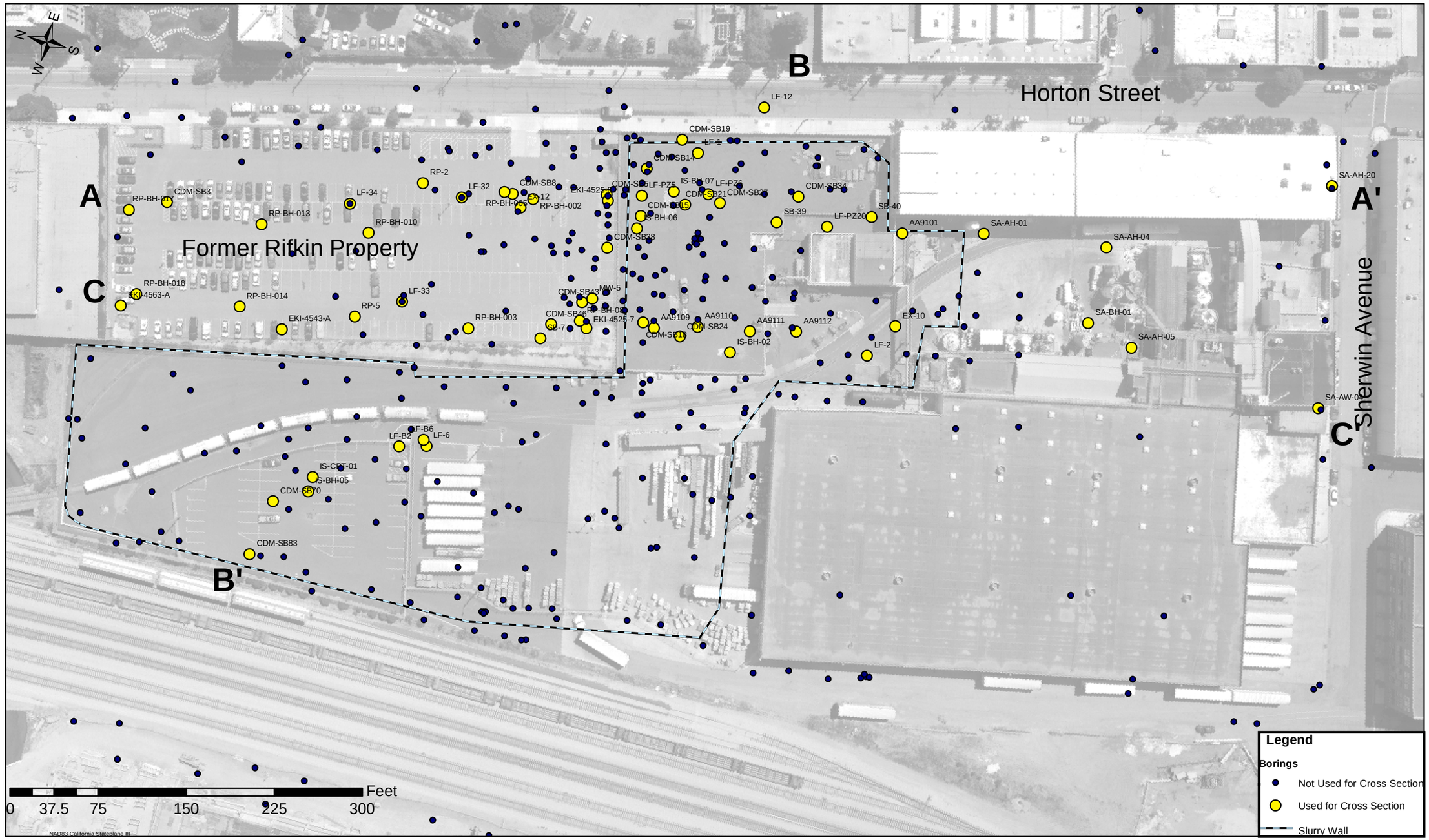
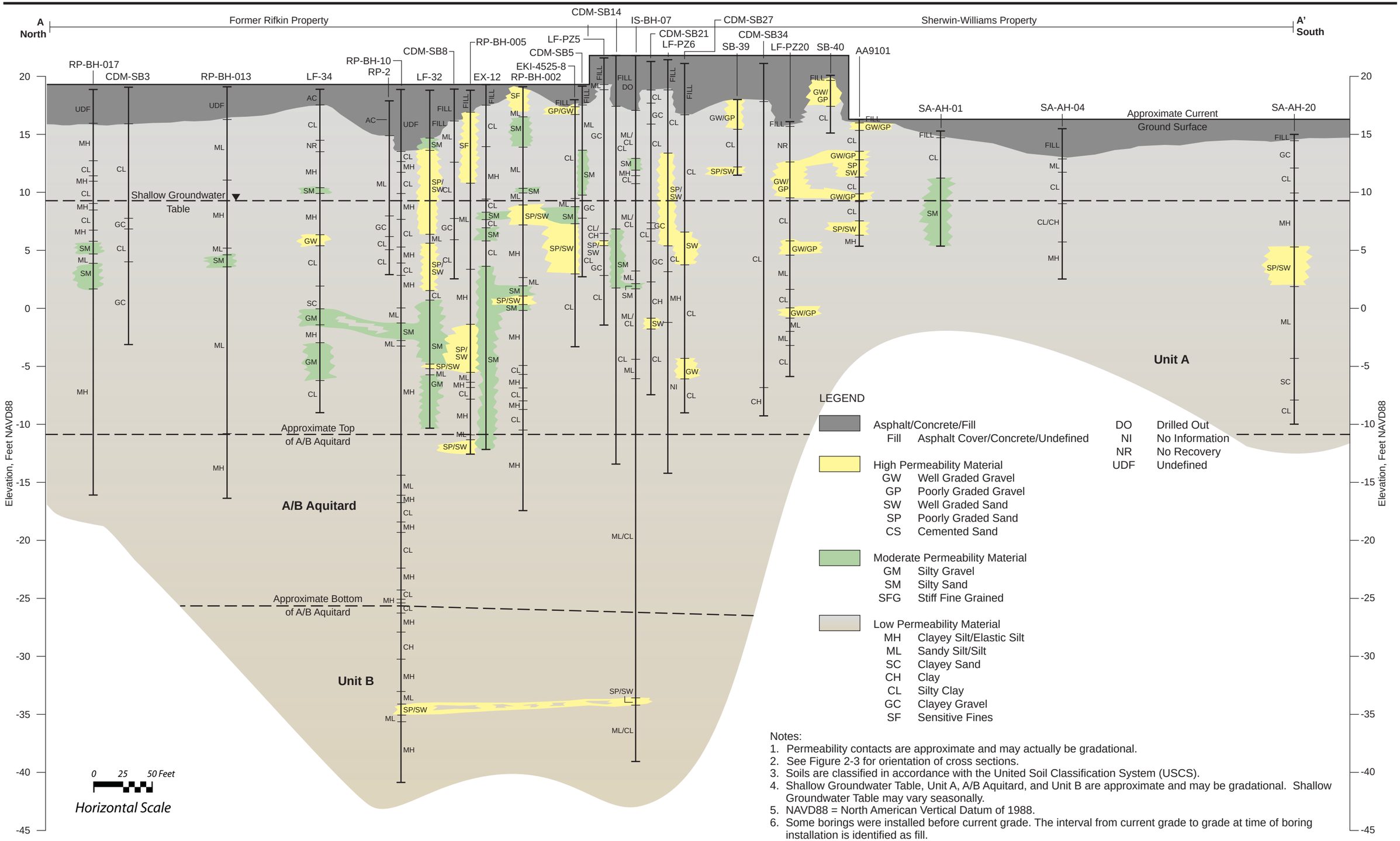


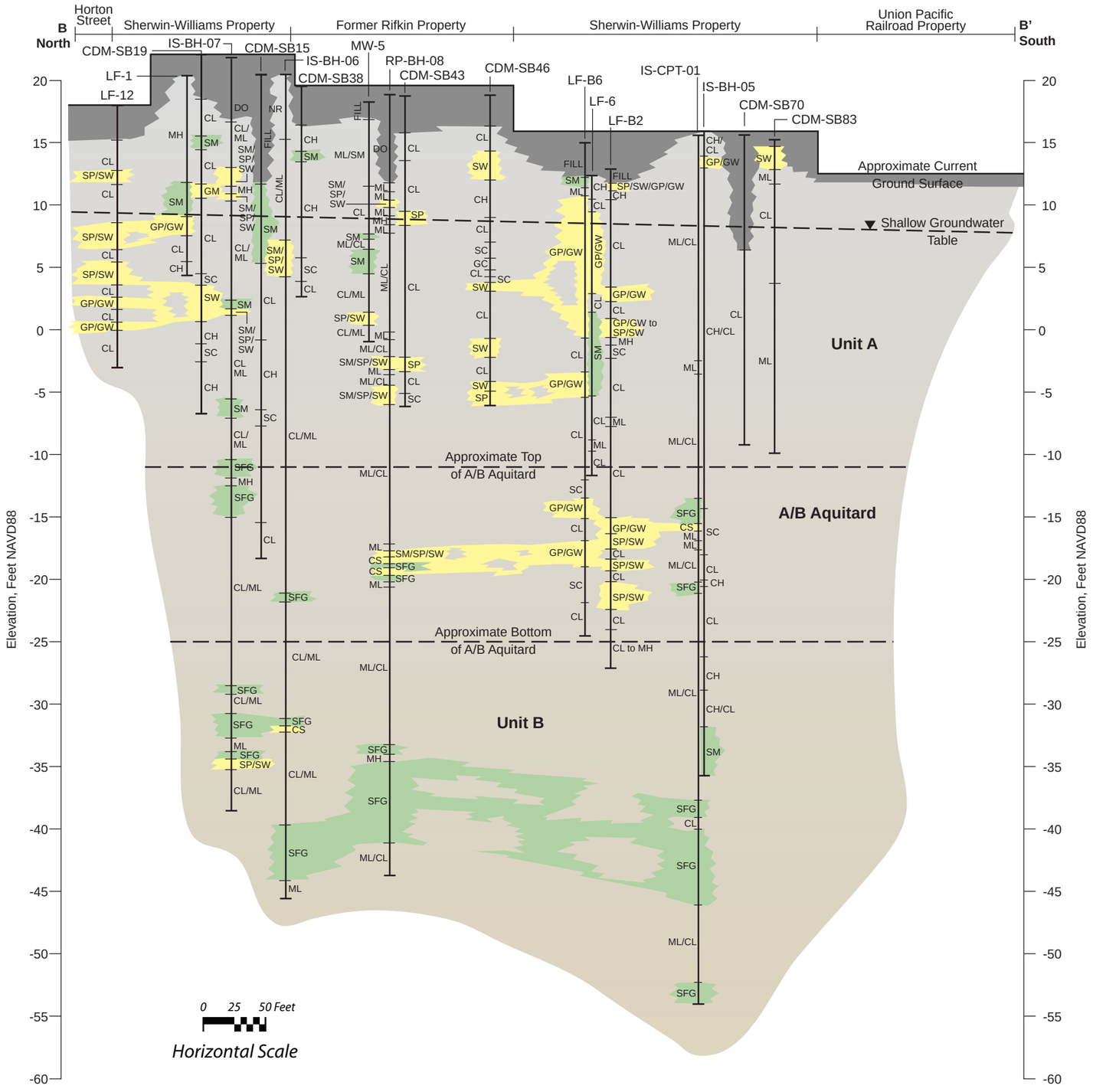
Figure 2-3
Geologic Cross Section Locations
Sherwin-Williams Company - Emeryville, California



Notes:
1. Permeability contacts are approximate and may actually be gradational.
2. See Figure 2-3 for orientation of cross sections.
3. Soils are classified in accordance with the United Soil Classification System (USCS).
4. Shallow Groundwater Table, Unit A, A/B Aquitard, and Unit B are approximate and may be gradational. Shallow Groundwater Table may vary seasonally.
5. NAVD88 = North American Vertical Datum of 1988.
6. Some borings were installed before current grade. The interval from current grade to grade at time of boring installation is identified as fill.

W:\REPORTS\Sherwin-Williams\Emeryville\Remedial Action Plan\Graphics\Geologic X-Sec A-A (Fig 2-4).ai 05/11/10 JJT

Figure 2-4
Geologic Cross Section A - A'
Sherwin-Williams Company - Emeryville, California



LEGEND

Asphalt/Concrete/Fill
Fill Asphalt Cover/Concrete/Undefined

High Permeability Material
GW Well Graded Gravel
GP Poorly Graded Gravel
SW Well Graded Sand
SP Poorly Graded Sand
CS Cemented Sand

Moderate Permeability Material
GM Silty Gravel
SM Silty Sand
SFG Stiff Fine Grained

Low Permeability Material
MH Clayey Silt/Elastic Silt
ML Sandy Silt/Silt
SC Clayey Sand
CH Clay
CL Silty Clay
GC Clayey Gravel
SF Sensitive Fines

DO Drilled Out
NI No Information
NR No Recovery
UDF Undefined

Notes:
1. Permeability contacts are approximate and may actually be gradational.
2. See Figure 2-3 for orientation of cross sections.
3. Soils are classified in accordance with the United Soil Classification System (USCS).
4. Shallow Groundwater Table, Unit A, A/B Aquitard, and Unit B are approximate and may be gradational. Shallow Groundwater Table may vary seasonally.
5. NAVD88 = North American Vertical Datum of 1988.
6. Some borings were installed before current grade. The interval from current grade to grade at time of boring installation is identified as fill.

W:\REPORTS\Sherwin-Williams\Emeryville\Remedial Action Plan\Graphics\Geologic X-sec B-B (Fig2-5).ai 05/11/10 JJT

CDM

Figure 2-5
Geologic Cross Section B - B'
Sherwin-Williams Company - Emeryville, California

C North — Former Rifkin Property — Sherwin-Williams Property — C' South

EKI-4563-A, RP-BH-018, RP-BH-014, EKI-4543-A, RP-5, LF-33, RP-BH-003, CDM-SB46, SB-7, RP-BH-08, EKI-4525-7, CDM-SB18, AA9109, AA9110, CDM-SB24, IS-BH-02, AA9111, AA9112, LF-2, EX-10, SA-BH-01, SA-AH-05, SA-AW-04

Approximate Current Ground Surface

Approximate Shallow Groundwater Table

Unit A

Approximate Top of A/B Aquitard

Approximate Bottom of A/B Aquitard

Elevation, Feet NAVD88

20, 10, 0, -10, -20, -30, -40, -50

LEGEND

Asphalt/Concrete/Fill
- Fill — Asphalt Cover/Concrete/ Undefined

High Permeability Material
- GW — Well Graded Gravel
- GP — Poorly Graded Gravel
- SW — Well Graded Sand
- SP — Poorly Graded Sand
- CS — Cemented Sand

Moderate Permeability Material
- GM — Silty Gravel
- SM — Silty Sand
- SFG — Stiff Fine Grained

Low Permeability Material
- MH — Clayey Silt/Elastic Silt
- ML — Sandy Silt/Silt
- SC — Clayey Sand
- CH — Clay
- CL — Silty Clay
- GC — Clayey Gravel
- SF — Sensitive Fines

- DO — Drilled Out
- NI — No Information
- NR — No Recovery
- UDF — Undefined

Notes:
1. Permeability contacts are approximate and may actually be gradational.
2. See Figure 2-3 for orientation of cross sections.
3. Soils are classified in accordance with the United Soil Classification System (USCS).
4. Shallow Groundwater Table, Unit A, A/B Aquitard, and Unit B are approximate and may be gradational. Shallow Groundwater Table may vary seasonally.
5. NAVD88 = North American Vertical Datum of 1988.
6. Some borings were installed before current grade. The interval from current grade to grade at time of boring installation is identified as fill.

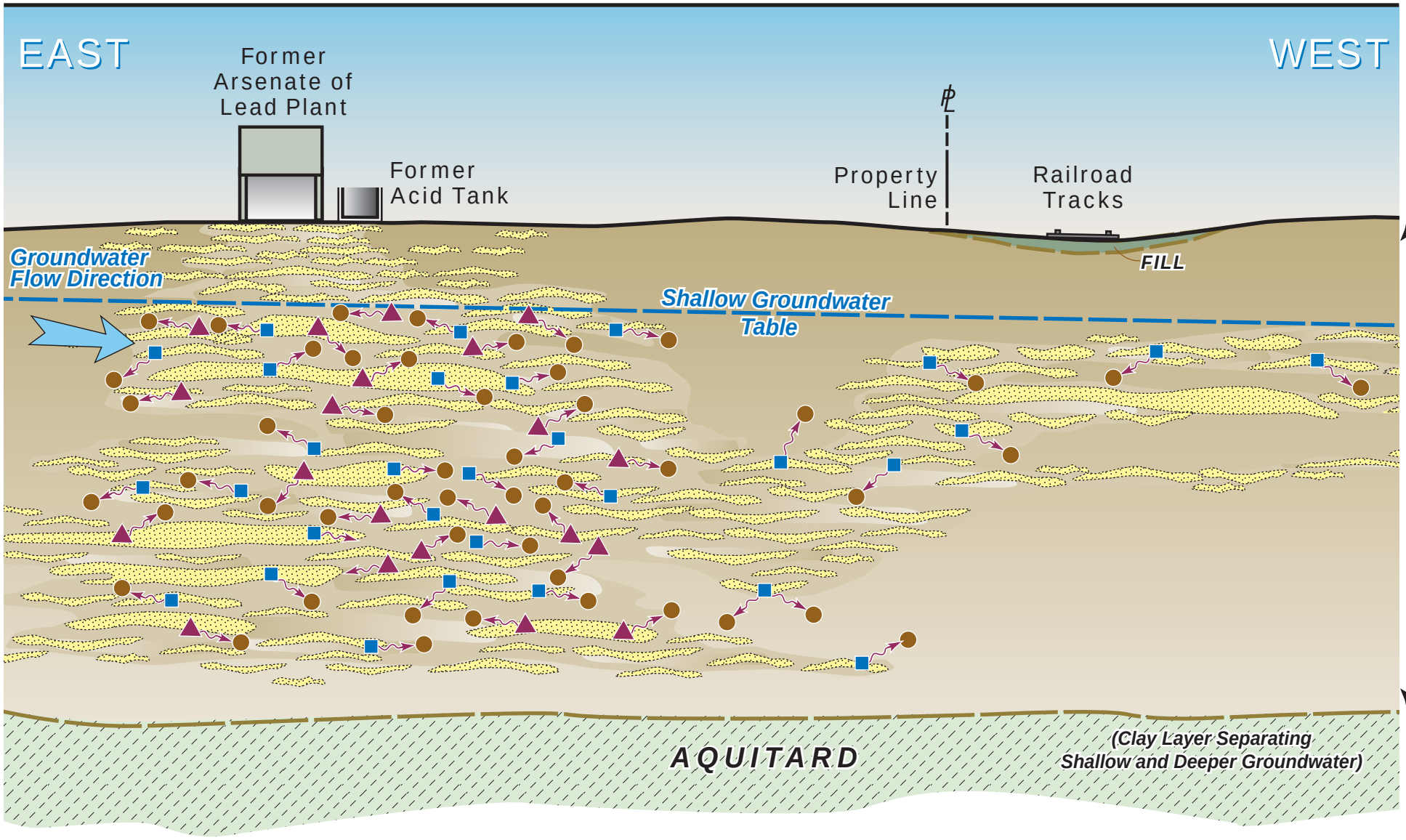
0 25 50 Feet

Horizontal Scale

W:\REPORTS\Sherwin-Williams\Emeryville\Remedial Action Plan\Graphics\Geologic X-Sec C-C (Fig2-6).ai 05/11/10 JJT

CDM

Figure 2-6
Geologic Cross Section C - C'
Sherwin-Williams Company - Emeryville, California



Drawing not to scale

W:\REPORTS\Sherwin-Williams\Emeryville\Remedial Action Plan\Graphics\CSM (Fig2-7).ai 05/11/10 JJT

Figure 2-7
Conceptual Site Model
Sherwin-Williams Company - Emeryville, California

CDM

Section 3
Remedial Action Objectives

This section presents the remedial action objectives (RAOs) for the remedial action and their associated cleanup goals. RAOs were developed based on action-, location-, and chemical-specific federal and state applicable or relevant and appropriate requirements (ARARs), as well as on appropriate federal, state, and local criteria, advisories, guidance, and proposed standards (i.e., TBCs). RAOs are also based on site-specific human health and environmental exposure concerns identified in the Site RA documents, which are based on the data generated from remedial investigations.

3.1 Applicable or Relevant and Appropriate Requirements

CERCLA, as amended by Superfund Amendments and Reauthorization Act, and analogous California regulations, require that remedial actions achieve a level of cleanup that protects human health and the environment. In addition, cleanup actions generally must attain ARARs, which are standards, criteria, or limits promulgated under federal or state law. Only those state standards that are promulgated, identified by the state in a timely manner, and more stringent than federal requirements may be considered ARARs (40 CFR 300.400 (g) (4)). An ARAR may describe a cleanup requirement that is either "applicable" or "relevant and appropriate." The identification of ARARs is site-specific and involves the following two-part analysis:

- Assessing the applicability of a given requirement; and
- If a given requirement is not applicable, evaluating whether it is relevant and appropriate.

3.1.1 Definition of ARARs

An applicable requirement is a promulgated federal or state standard or other substantive environmental protection requirement, criteria, or limitation that specifically addresses a hazardous constituent, remedial action, location, or other circumstance at a Superfund site. For a requirement to be "applicable," the remedial actions or the circumstances at the site must be within the intended scope and authority of the requirement. For example, MCLs are standards that must be met by owners/operators of public drinking-water supply systems. MCLs are applicable "at the tap" and are enforced by either the USEPA or the state for water supplied by a public water supply system.

A "relevant and appropriate" requirement is a promulgated federal or state standard or other substantive environmental protection requirement, criteria, or limitation that addresses problems or situations similar to those encountered, even though the requirement is not legally "applicable." In some circumstances, a requirement may be "relevant" but not appropriate for the site-specific situation. Such a requirement would not be an ARAR for the Site. If only part of a requirement is "relevant and

appropriate," the portion that is not considered "relevant and appropriate" need not be addressed. If a determination is made that a requirement is both "relevant and appropriate," such a requirement should be given the same consideration as an "applicable" requirement. The criteria for determining relevance and appropriateness are listed in 40 CFR 300.400 (g) (2) of the NCP as follows:

i. The purpose of the requirement and the purpose of the CERCLA action;

ii. The medium regulated or affected by the requirement and the medium contaminated or affected at the CERCLA site;

iii. The substances regulated by the requirement and the substances found at the CERCLA site;

iv. The actions or activities regulated by the requirement and the remedial action contemplated at the CERCLA site;

v. Any variances, waivers, or exemptions of the requirement and their availability for the circumstances at the CERCLA site;

vi. The type of place regulated and the type of place affected by the release or CERCLA action;

vii. The type and size of structure or facility regulated and the type and size of structure or facility affected by the release or contemplated by the CERCLA action;

viii. Any consideration of use or potential use of affected resources in the requirement and the use or potential use of the affected resource at the CERCLA site; and

ix. Non-promulgated federal and state standards, policies, advisories, guidance documents, and local requirements are not ARARs. However, they are considered to be other criteria and guidelines to be considered (TBCs) when remediating to protect human health and the environment.

3.1.2 Types of ARARs

There are three types of ARARs: chemical-, action-, and location-specific:

- Chemical-specific ARARs are health- or risk-based concentration limits for specific hazardous substances or contaminants. Examples of this type of ARAR are federal and state drinking-water standards.

- Action-specific ARARs are technology-based requirements that are triggered by the type of remedial action under consideration. Examples of action-specific ARARs

are the National Pollutant Discharge Elimination System (NPDES) requirements, which prohibit discharge of pollutants to waters of the United States unless a permit is issued in conformance with Clean Water Act standards. RCRA regulations for hazardous waste generation, handling, transportation, storage, treatment, and disposal are another example of an action-specific ARAR.

- Location-specific ARARs impose restrictions on certain types of activities, based onsite characteristics. Examples of location-specific ARARs include restrictions on activities in wetlands, flood plains, and historical sites.

3.1.3 Identification Process for ARARs/TBCs

NCP §300.430 (b) (9) provides for identification of potential ARARs and TBCs to be initiated during the scoping phase of the project. However, the ARAR and TBC identification process continues throughout the RI/FS process, as a better understanding is gained of site conditions, site contaminants, and remedial action alternatives. Table 3-1 provides a summary of ARARs and TBCs for the Site remedial action.

3.1.3.1 Settlement Agreement between Sherwin Williams and Novartis

In Table 3-1, the settlement agreement between S-W and Novartis is identified as a TBC. Therefore, the current provisions of the settlement agreement were used for evaluation purposes in the FS (CDM, 2009b). Based on ongoing discussions, S-W and Novartis are renegotiating this agreement and therefore, the provisions of this TBC will need to change in order to implement the remedial action presented in this RAP. Modification to the agreement will be addressed by DTSC through the RAP review and approval process.

3.2 Remedial Action Objectives

RAOs are media-specific remediation goals for protecting human health and the environment. RAOs specify the compounds of concern, exposure routes and receptors, and remediation goals for each exposure route. They are developed based on action-, location-, and chemical-specific federal and state ARARs, as well as on appropriate federal, state, and local criteria, advisories, guidance, and proposed standards (i.e., TBCs). They are also based on the site-specific human health and environmental exposure concerns identified in the HHRA, which is based on the data generated during the RI.

The following RAOs are identified for the Site remedial actions:

- Minimize direct contact/ingestion by humans with Site soil containing COCs at concentrations exceeding the cleanup goals;

- Minimize migration of and/or inhalation of airborne dust by humans from the Site containing COCs at concentrations exceeding the cleanup goals;

- Minimize exposure to and inhalation by humans of volatile organic COCs at concentrations in indoor air exceeding the cleanup goals;
- Minimize risk to down-gradient ecological receptors from off-site groundwater migration containing COCs at concentrations exceeding the cleanup goals; and
- Minimize on-site human contact with groundwater containing COCs at concentrations exceeding the cleanup goals.

RAOs can be fulfilled by one or more of the following processes: reducing the mass, volume, toxicity, or mobility of the COCs and reducing the potential exposure pathways for the COCs.

3.3 Cleanup Goals

Cleanup goals, serving as quantitative proposed cleanup goals for the RAOs, are developed based on action levels as defined in ARARs, TBCs, and/or the Site HHRA. The cleanup goals are "conservatively calculated threshold values below which particular chemicals are believed to present no significant risk to humans or natural resources that might be exposed to the particular hazardous material." (USEPA, 2004).

Chemical specific-cleanup goals were developed from two general sources: concentrations based on appropriate or relevant and applicable requirements (ARARs); and concentrations based on risk assessments. Concentration-based ARARs for selection of cleanup goals included: USEPA Region IX PRGs; California Environmental Protection Agency (CalEPA) California Human Health Screening Levels (CHHSLs); Regional Water Board Basin Plan numerical water quality objectives; California DHS MCLs; and the Office of Environmental Health Hazard Assessment (OEHHA) Public Health Goals (PHGs).

The development of remedial goals (RGs) constitutes a core component of the development and screening of potential remedial alternatives conducted during the Feasibility Study. It should be noted that until the final remedy is selected, these cleanup goals, whether ARARs-based or risk-based, constitute initial guidelines, not final RGs (NCP, 40CFR 300.430(e)(2)(i)).

As summarized in Section 2.4.5, the HHRA (Gradient, 2005) presented site-specific RBTLs for various human activity and exposure assumptions. The cleanup goals presented in Table 3-2 for soil are based on these RBTLs for the unrestricted resident exposure scenarios, with the exception of arsenic. The arsenic cleanup goal is the proposed naturally occurring background concentration.

For groundwater, concentration-based ARARs/TBCs for selection of cleanup goals included: DTSC California Human Health Screening Levels (CHHSLs); Regional Water Quality Control Board (Water Board) Basin Plan numerical water quality objectives; Water Board Environmental Screening Levels (ESLs); and California

Department of Health Services (CDHS) Maximum Contaminant Levels (MCLs). A summary of groundwater cleanup goals are presented in Table 3-3.

The USEPA advises that exceeding a cleanup goal concentration "suggests that further evaluation of the potential risks that may be posed by site contaminants is appropriate" (USEPA, 1999). The USEPA advises that further evaluation steps may include "consideration of ambient levels in the environment, or a reassessment of the assumptions contained in the screening level estimates (e.g., appropriateness of route-to-route extrapolations)" (USEPA, 1999).

3.3.1 Comparative Analysis

A comparative analysis of laboratory analytical results from soil samples collected was conducted against the soil cleanup goals identified above. All the soil COCs have been detected above their respective cleanup goals within vadose zone soil at the Site. However, the extents of these soil COC detections are bounded within the extent of arsenic.

A comparative analysis of laboratory analytical results from groundwater samples collected through March 2006 was conducted against the groundwater cleanup goals identified above. The following COCs have been detected above their respective cleanup goals within groundwater under the Site (S-W property and portion of the former Rifkin property):

- 1,2-dichloroethane
- 1,2,3-trichloropropane
- acetone
- arsenic
- methyl tert butyl ether
- toluene
- xylenes

The following COCs have been detected above their cleanup goals in groundwater immediately downgradient of the Site (including that portion of the former Rifkin property not considered part of the Site):

- 1,2-dichloroethane
- arsenic
- methyl tert butyl ether
- toluene

Arsenic is the only inorganic COC detected in groundwater above its cleanup goal. The other COCs are organic and attenuate significantly across the Site and are at or near their cleanup goals at the downgradient property boundary. The organic COCs are expected to continue to attenuate into the future and eventually decrease to concentrations below their cleanup goals.

Table 3-1
Summary of Applicable or Relevant and Appropriate Requirements
Sherwin-Williams Emeryville Remedial Action Plan

Reference				*Reasons*	*Media*		*ARAR*[1]	*TBC*
					Soil	*Water*		
FEDERAL								
I. Contaminant Specific								
	A.		Clean Air Act (CAA) (42 USC 7401-7642) (40 CFR 50-69)	Remediation of soil or groundwater that could produce a vapor or dust discharge would be required to meet National Ambient Air Quality Standards (NAAQS).	**X**	**X**	**X-RA**	
	B.		Clean Water Act (CWA) as amended by the Water Quality Act of 1987 (33 USC 1251-1376) (40 CFR 100-149)	Storm run off water, extracted groundwater, or soil remediation process water from the Site discharged to a surface water body (including discharge to a storm drain or flood channel) would require attainment of Water Quality Criteria.	**X**	**X**	**X-A**	
		1	Maximum Contaminant Levels (MCLs)	MCLs may be used to establish water discharge standards and groundwater remediation standards.		**X**	**X-A**	
		2	Maximum Contaminant Levels Goal (MCLGs)	Some contaminants of concern (COCs) present in soil and groundwater may not yet be formally regulated and MCLGs may provide guidance for remediation standards for water discharge.		**X**		**X**
		3	Secondary Maximum Contaminant Levels (SMCLs) (40 CFR 143.3)	The aquifer is a potential drinking water source. Therefore, quality of color or odor of the water source should be considered.		**X**		**X**
II. Location Specific								
	A.		Resource Conservation and Recovery Act (RCRA) as amended by Hazardous and Solid Waste Amendments (HSWA) (42 USC 7401-7462) (40 CFR 260-280)	The treatment facility for remediation of soil or groundwater (if the soil or groundwater is considered to be a hazardous waste) may be required to be a certain minimum distance from a fault and not within a floodplain.	**X**	**X**	**X-RA**	

Table 3-1
Summary of Applicable or Relevant and Appropriate Requirements
Sherwin-Williams Emeryville Remedial Action Plan

Reference				*Reasons*	*Media*		*ARAR*[1]	*TBC*
					Soil	*Water*		
	B.		Executive Order on Flood Plain Management (Exec. Order No. 11,988) (40 CFR 6.302 and Appendix A)	Remedial Actions occurring in a floodplain should avoid adverse effects, minimize potential harm, restore and preserve natural and beneficial values. Federal agencies are directed to ensure that planning programs reflect consideration of floodplain management	**X**	**X**	**X-RA**	
	C.		National Archaeological and Historical Preservation Act (16 USC 469) (36 CFR Part 65)	Requires action to recover and preserve artifacts if removal action threatens significant scientific, prehistoric, historic, archeological data. No = historic artifacts are currently known to be present at the Site. However, due to Emeryville's Bay shoreline location and the existence of known nearby archaeological sites, there is a potential of encountering previously unrecorded Native American cultural resources at the Site.	**X**	**X**	**X-RA**	
	D.		National Historic Preservation Act (NHPA) (16 USC 470 et seq.) (36 CFR Part 800)	Established to preserve historic properties. Buildings 1 and 31 are designated Tier 1 (primary architectural significance) in the Park Avenue Overlay District. These buildings contribute to the National Register-eligible Emeryville Historic Industrial District	**X**	**X**	**X-A**	
	E.		Endangered Species Act (16 USC 1531 et seq.) (50 CFR Part 17, 200, 402) (40 CFR 6.302(h))	Remedial actions should avoid disturbance of endangered or threatened species or to terrain which is habitat for endangered or threatened species. No known endangered species or their habitat are present at this Site.	**X**	**X**	**X-RA**	
	F.		Fish and Wildlife Coordination Act (16 USC 661et seq.) (33 CFR Parts 320-330)	Designed to protect waters where fish, plant life, or bird life exist. Water discharge from any potential Site soil or groundwater remediation is not expected to enter surface waters.	**X**	**X**	**X-RA**	

Table 3-1
Summary of Applicable or Relevant and Appropriate Requirements
Sherwin-Williams Emeryville Remedial Action Plan

Reference				*Reasons*	*Media*		*ARAR*[1]	*TBC*
					Soil	*Water*		
	G.		Clean Water Act (CWA) (33 USC 1251-1376) (40 CFR Part 6, Appendix A)	Designed to protect wetlands and the drainage areas which feed wetlands. Water discharge from any potential Site soil or groundwater remediation is not expected to enter any wetlands.	**X**	**X**	**X-A**	
III. Action Specific								
	A.		Resource Conservation and Recovery Act (RCRA) as amended by Hazardous and Solid Waste Amendments (HAWS) (42 USC 7401-7642)(40 CFR 260-280)	Regulates treatment, storage and disposal of hazardous wastes. Soil, which may be considered hazardous waste under RCRA, may be accumulated, stored, transported, treated or disposed.	**X**		**X-RA**	
	B.		Clean Water Act (CWA) as amended by the Water Quality Act of 1987 (33 USC 1251-1376) (40 CFR 100-149)	Storm run off water, extracted groundwater, or soil remediation process water from the Site discharged to a surface water body (including discharge to a storm drain or flood channel) would require attainment of Water Quality Criteria.	**X**	**X**	**X-RA**	
		1	National Pollutant Discharge Elimination System (NPDES) (40 CFR 122-125)	Treated groundwater may require permit for on-site or off-site disposal.		**X**	**X-RA**	
		2	Water Quality Standards [CWA 402 (a)(1)]	Remediation of groundwater may require treatment to promulgated water quality standards.		**X**	**X-RA**	
		3	Discharge to Publicly Owned Treatment Works (POTWs) (CWA 307)	Establishes discharge limits for disposal to the sanitary sewer system. Treated groundwater could potentially be disposed to the sanitary sewer.		**X**	**X-RA**	
		4	Storm Water Discharge Requirements [CWA 402(p)]	Establishes requirements for storm water discharge. Groundwater or soil remedial action should ensure storm water discharge at the Site is in compliance.	**X**	**X**	**X-RA**	

Table 3-1
Summary of Applicable or Relevant and Appropriate Requirements
Sherwin-Williams Emeryville Remedial Action Plan

Reference				*Reasons*	*Media*		*ARAR*[1]	*TBC*
					Soil	*Water*		
	C.		Safe Drinking Water Act (SWDA) (42 USC 300f-300j) (40 CFR 144-146)	Establishes National primary drinking water standards (MCLs) and regulates injection of wastes to the subsurface through wells. MCLs may be used to establish water discharge standards and groundwater remediation standards.		**X**	**X-RA**	
	D.		Clean Air Act (CAA)(42 USC 7401-7642)(40 CFR 60.50-60.54)	Remedial alternatives for soil or groundwater may produce a vapor effluent stream or dusts.	**X**	**X**	**X-RA**	
	E.		Occupational Safety and Health Act (OHSA)(29 USC 651 et seq.) (19 CFR 1910)	Remedial action operations for soil and groundwater remediation are subject to health and safety requirements for protection of workers.	**X**	**X**	**X-RA**	
	F.		Noise Control Act of 1972 as amended by the Quiet Communities Act of 1978 (CFR 204, 205, 211)	Construction, transportation, and treatment equipment may increase noise levels at property boundaries.	**X**	**X**		**X**
STATE AND LOCAL								
I. Contaminant Specific								
	A.		Hazardous Waste Control Act (HWCA) (CH&SC 25100-25395) as administered by the CA Department of Toxic Substance Control (DTSC) under the CA Code of Standards for Management of Hazardous and Extremely Hazardous Wastes.	Establishes standards for management of hazardous waste. Groundwater or soil that may be considered to be hazardous waste, may be treated, stored, transported, and/or disposed.	**X**	**X**	**X-RA**	
		1	Criteria for identifying Hazardous Wastes (22 CCR 66261.1-66262.7)	Establishes criteria for identifying RCRA and non-RCRA hazardous wastes.	**X**	**X**	**X-RA**	
		a)	Persistent and Bioaccumulative Toxic Substances (22 CCR 66262.7)	Regulatory levels have been set for COCs identified at the Site.	**X**	**X**	**X-RA**	
	B.		Porter-Cologne Water Quality Control Act (CWC 13000-13806) as administered by the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (Water Board) under 23 CCR 2200 - 2714	Treated groundwater may be discharged to a surface water source or to an injection well.		**X**	**X-RA**	

Table 3-1
Summary of Applicable or Relevant and Appropriate Requirements
Sherwin-Williams Emeryville Remedial Action Plan

Reference				*Reasons*	*Media*		*ARAR*[1]	*TBC*
					Soil	*Water*		
		1	San Francisco Bay Regional Water Quality Control Board Basin Plan and associated implementation policies	Establishes beneficial uses and water quality objectives. Remediation of soil and groundwater includes consideration of State and regional water quality objectives. Surface water and groundwater designated for use as domestic or municipal supply shall not contain concentrations of COCs at or above MCLs.	**X**	**X**	**X-A**	
	C.		San Francisco Bay Regional Water Quality Control Environmental Screening Levels (ESLs)	ESLs may be utilized to determine potential concern to human health and the environmental from residual concentrations of COCs in Site soil, soil gas, and groundwater.	**X**	**X**		**X**
	D.		California Human Health Screening Levels (CHHSLs)	CHHSLs may be utilized to determine potential concern to human health from residual concentrations of COCs in Site soil and soil gas.	**X**	**X**		**X**
II. Location Specific								
	A.		Fish and Game Code Division 6, Part 1, Chapter 2, Sections 5650-5656	If treated groundwater or processed water from soil remediation is discharged to a surface water source or a storm drain, the discharged water should contain no deleterious compounds that will affect fish, plant, or bird life.	**X**	**X**	**X-RA**	
	B.		State Water Resources Control Board Sources of Drinking Water Supply (Resolution 88-63)	Soil cleanup goals and groundwater numerical water quality objectives may be controlled by applicability of drinking water standards as determined by site-specific yield and total dissolved solids in groundwater.	**X**	**X**	**X-A**	
	C.		Department of Toxic Substances Control (DTSC) Imminent and Substantial Endangerment Determination and Order and Remedial Action Order No. 05/06-007 (the Order)	The Order specifies specific requirements for the development and implementation of remedial actions for soil and groundwater at the Site.	**X**	**X**	**X-A**	

Table 3-1
Summary of Applicable or Relevant and Appropriate Requirements
Sherwin-Williams Emeryville Remedial Action Plan

Reference				*Reasons*	*Media*		*ARAR*[1]	*TBC*
					Soil	*Water*		
	D.		Settlement Agreement between Sherwin-Williams and Novartis regarding the Former Rifkin Property	Establishes criteria for remedial actions on the Former Rifkin Property.	**X**	**X**		**X**
	E.		City of Emeryville Noise Ordinance (Ordinance No. 03-002) http://www.ci.emeryville.ca.us/gov/pdf/ord-noise.pdf	Establishes criteria for noise generation within the City of Emeryville.	**X**	**X**	**X-RA**	
	F.		San Francisco Regional Board Basin Plan and associated implementation policies	Establishes beneficial uses and water quality objectives. Remediation of soil and groundwater includes consideration of State and regional water quality objectives. The Plan sets discharge prohibitions of impacted groundwater containing COCs into clean water.	**X**	**X**	**X-A**	
	G.		Park Avenue District Plan	The Site is within the Park Avenue District. The plan guides redevelopment of sites within the District. As such the planed use of the property with respect to evaluation of remedial actions should be consistent with Park Avenue District Plan.	**X**	**X**		**X**
	H.		Chiron Planned Unit Development (PUD) and Preliminary Development Plan (PDP)	The Former Rifkin Property future use is governed by the City of Emeryville-approved development plan. As such the planed use of the property with respect to evaluation of remedial actions should be consistent with development plan.	**X**	**X**		**X**
	I.		City of Emeryville General Plan	The Site is within the City of Emeryville. The City General Plan. The plan is the blueprint for the future growth and development of the city. As such the planed use of the property with respect to evaluation of remedial actions should be consistent with General Plan.	**X**	**X**		**X**

Table 3-1
Summary of Applicable or Relevant and Appropriate Requirements
Sherwin-Williams Emeryville Remedial Action Plan

Reference				*Reasons*	*Media*		*ARAR*[1]	*TBC*
					Soil	*Water*		
III. Action Specific								
	A.		Hazardous Waste Control Act (HWCA) (Health and Safety Code Section 25100-25395) as administered by the DTSC under CCR Title 22: Standards for Management of Hazardous Wastes	Site soil or groundwater with COCs may be considered hazardous waste which would require compliance with regulations for accumulation, transportation, treatment, or disposal.	**X**	**X**	**X-RA**	
		1	Identification and Listing of Hazardous wastes (22 CCR Division 4.5, Chapter 11, 22 CCR 66261.2-66261.126)	Treated soil or groundwater that is identified as hazardous waste would be identified as "listed" or as "characteristic".	**X**	**X**	**X-RA**	
		2	Standards Applicable to Generators of Hazardous Waste (22 CCR Division 4.5, Chapter 12, 22 CCR 66261.1-66262.7)	Offsite disposal requires characterization of waste	**X**	**X**	**X-RA**	
			Hazardous Waste Accumulation (22 CCR 66262.34)	On-site hazardous waste accumulation is allowed for up to 90 days as long as the waste is stored in containers or in tanks, on drip pads, inside buildings, is labeled and dated, etc.	**X**	**X**	**X-RA**	
		3	Deed Restrictions (22 CCR Division 4.5, Chapter 39; 22 CCR 67390.2)	The property may be restricted from certain future development, if COCs identified on-site, are not addressed to unrestricted standards.	**X**	**X**	**X-RA**	
		4	Corrective Action Management Units and Temporary Units. (22 CCR 66264.552-66264.53)	A temporary treatment unit may be set up at the Site. Soil pending treatment may be stockpiled at the Site.	**X**		**X-RA**	
		5	Hazardous Waste Haulers Act (22 CCR Chapter 30)	Governs transportation of hazardous materials in California.	**X**	**X**	**X-RA**	
		6	Land Disposal Restrictions (22 CCR Chapter 18)	Requires that certain hazardous wastes meet minimum treatment standards prior to land disposal.	**X**	**X**	**X-RA**	

Table 3-1
Summary of Applicable or Relevant and Appropriate Requirements
Sherwin-Williams Emeryville Remedial Action Plan

Reference				*Reasons*	*Media*		*ARAR*[1]	*TBC*
					Soil	*Water*		
	B.		Porter-Cologne Water Quality Control Act, (CWC 13000-13806) as administered by the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (Water Board) under 23 CCR 2050-2836	The San Francisco Regional Water Quality Control Board (Water Board) may require that treatment technology perform at a level near Best Available Technology (BAT) and may establish waste disposal requirements.	**X**	**X**	**X-RA**	
		1	Waste Discharge to Land Requirements (23 CCR Chapter 15) (23, CCR 2260-2597)	Remediation projects are exempt, but regulations should be considered and followed to the extent possible.	**X**	**X**	**X-RA**	
		2	State Water Resources Control Board Antidegradation Policy (Resolution 68-16)	If treated groundwater is disposed to a water source of the state, then the quality of the water source is to be protected.	**X**	**X**	**X-RA**	
		3	Discharge to Sanitary Sewer	Treated groundwater may be disposed to a sanitary sewer.	**X**	**X**	**X-RA**	
	C.		California Safe Drinking Water Act (Cal-SWDA) (CH&SC 4010-4095) (22 CCR 64401-64475)	Treated groundwater may be disposed of to an injection well. The aquifer that the injection well feeds may be a potential drinking source.		**X**	**X-RA**	
		1	Maximum Contaminant Levels (MCLs) (22 CCR 64435, 64444.5)	MCLs may be used to establish the standard for groundwater remediation or water discharge.		**X**	**X-RA**	
		2	Advisory Drinking Water Action Levels (ALs)	Some COCs present at the Site may not yet be formally regulated. Action Levels would provide a non-binding guidance for allowable concentrations.		**X**		**X**
		3	Advisory Applied Action Levels	The risk posed to biological receptors by a potential groundwater remediation system must be evaluated.		**X**		**X**

Table 3-1
Summary of Applicable or Relevant and Appropriate Requirements
Sherwin-Williams Emeryville Remedial Action Plan

Reference				*Reasons*	*Media*		*ARAR*[1]	*TBC*
					Soil	*Water*		
	D.		Bay Area Air Quality Management District (BAAQMD) regulations	The BAAQMD has is that local implementation agency for the Federal Clean Air Act.				
		1.	BAAQMD Regulation 2, Rule 5	This rule addresses conditions where a health screening assessment must be completed. As arsenic is a COC a health screening assessment needs to be addressed. Human health risk criterion is set at ten in a million for this assessment.	**X**	**X**	**X-RA**	
		2.	BAAQMD Regulation 6, Particulate Matter	This rule limits emissions of particulate matter. This rule may apply as air-borne particulate matter may be generated during soil removal and soil handling.	**X**	**X**	**X-RA**	
		3.	BAAQMD Regulation 8, Rules 40 and 47, Volatile Organics	This rule sets limits on the quantity of odorous emissions from any general operation and may be applicable during the implementation of the remedial action. This rule may apply as portions of the source area proposed to be excavated contain odorous organic compounds. These rules may apply as VOC-impacted soils may require on-site aeration or soil vapor extraction prior to off-site disposal.	**X**	**X**	**X-RA**	
		4.	BAAQMD Regulation 11, Lead	This rule limits emission of lead to the atmosphere and may be applicable as excavation and handling of soils may occur.	**X**	**X**	**X-RA**	
	E.		California Safe Drinking Water and Toxic Enforcement Act (Proposition 65) (Health and Safety Code Section 25249.5 et seq.) as implemented under Title 26 CCR Sections 22-12000 et seq.	Some COCs at the Site are identified as carcinogens or reproductive toxins	**X**	**X**	**X-RA**	

Table 3-1
Summary of Applicable or Relevant and Appropriate Requirements
Sherwin-Williams Emeryville Remedial Action Plan

Reference				*Reasons*	*Media*		*ARAR*[1]	*TBC*
					Soil	*Water*		
	F.		California Clean Air Act (CH&SC 39000-44563) as implemented by the local Air Quality Management Districts and overseen by the Air Resources Board under 17 CCR Division 3	Groundwater or soil treatment process may produce a vapor effluent subject to discharge limitations.	**X**	**X**	**X-RA**	
		1	Air Pollution Control District (APCD) Rules and Regulations	Groundwater or soil treatment process may produce a vapor effluent subject to Rules and Regulations of the APCD.	**X**	**X**	**X-RA**	
	G.		California Occupational Health and Safety Act, CLC 6300 et seq.	Remedial actions require appropriate worker protection.	**X**	**X**	**X-RA**	
	H.		City of Emeryville Municipal Code, Title 7, Public Works	Outlines requirements for excavation and grading activities, including obtaining a permit from the City Public Works Department.	**X**		**X-RA**	
	I.		City of Emeryville Stormwater Guidelines for Green, Dense Redevelopment: Stormwater Quality Solutions	Guidelines for complying with stormwater requirements.	**X**	**X**		**X**
	J.		Stockpiling Requirements for Contaminated Soil (CH&SC 25123.3(a)(20))	Establishes standards for stockpiling of non-RCRA contaminated soil.	**X**		**X-RA**	
	K.		California Environmental Quality Act	Mandates environmental review of projects considered for approval by governmental agencies, including DTSC, Water Board, BAAQMD, and others.	**X**	**X**	**X-RA**	
	L.		Land Use Controls (LUCs)	LUCs may be implemented if COCs identified on-site, are not addressed.	**X**	**X**		**X**
		1	ASTM Standard E 2091-00: "Standard Guide for Use of Activity and Use Limitations, Including Institutional and Engineering Controls, American Society for Testing and Materials (ASTM)"	LUCs may need to be evaluated similar to the evaluation criteria of remedial technologies and process options.	**X**	**X**		**X**

Table 3-1
Summary of Applicable or Relevant and Appropriate Requirements
Sherwin-Williams Emeryville Remedial Action Plan

Reference				*Reasons*	*Media*		*ARAR*[1]	*TBC*
					Soil	*Water*		
		2	DTSC Management Memo #EO-02-002-MM: "Response Action for Sites Where Future Use May Include Sensitive Uses"	LUCs may need to be incorporated into remedial alternatives. DTSC expects that any remedial alternative, that includes leaving contaminants at levels not suitable for unrestricted use, include LUCs that protect human health and the environment.	**X**	**X**		**X**

Notes:
ARAR - applicable or relevant and appropriate requirement for the remedial action
TBC - other criteria or guideline to be considered for the remedial action
Abbreviated regulatory codes:
USC - United States Code
CFR - Code of Federal Regulations
CCR - California Code of Regulations
CH&SC - California Health and Safety Code
CWC - California Water Code
CLC - California Labor Code
1 – For ARARs, X-A indicates an applicable requirement; X-RA indicates a relevant and appropriate requirement.

Table 3-2
Cleanup Goals for COCs in Vadose Zone Soil
Sherwin-Williams Emeryville Remedial Action Plan

	Cleanup Goal (mg/kg)	*Basis*
Volatile Organic Compounds		
ACETONE	70000	RBTL
BENZENE	0.015	RBTL
4-CHLOROANILINE	310	RBTL
ETHYLBENZENE	7800	RBTL
TETRACHLOROETHENE	0.063	RBTL
TOLUENE	100	RBTL
XYLENES	2300	RBTL
Semivolatile Organic Compounds		
BENZO(A)ANTHRACENE	1.1	RBTL
BENZO(B)FLUORANTHENE	1.1	RBTL
BENZO(B,K)FLUORANTHENE	1.1	RBTL
NAPHTHALENE	1300	RBTL
PHENANTHRENE	4500	RBTL
Inorganic Compounds		
ANTIMONY	31	RBTL
ARSENIC	24	Background Level
BARIUM	5500	RBTL
CADMIUM	3.1	RBTL
CHROMIUM (+3)	120000	RBTL
CHROMIUM (+6)	1600	RBTL
LEAD	250	RBTL
SELENIUM	390	RBTL
ZINC	23000	RBTL

Notes:
COC - Chemical of Concern
RBTL - Risk Based Threshold Level
Background Level - for arsenic as presented in Human Health Risk Assessment
mg/kg - milligram per kilogram

CDM

Table 3-3
Cleanup Goals for COCs in Groundwater
Sherwin-Williams Emeryville Remedial Action Plan

	Cleanup Goal (mg/L)	***Basis***
Volatile Organic Compounds		
ACETONE	1.5	ESL
BENZENE	0.001	MCL
2-BUTANONE	4.2	ESL
1,2-DICHLOROETHANE	0.0005	MCL
1,2-DICHLOROPROPANE	0.005	MCL
ETHYLBENZENE	0.3	MCL
METHYL ISOBUTYL KETONE	0.12	ESL
METHYL TERT BUTYL ETHER	0.013	MCL
TOLUENE	0.15	MCL
TRICHLOROETHENE	0.005	MCL
1,2,3-TRICHLOROPROPANE	0.005	ESL
1,3,5-TRIMETHYLBENZENE	0.46	RBTL
1,2,4-TRIMETHYLBENZENE	0.14	RBTL
VINYL CHLORIDE	0.0005	MCL
XYLENES	0.02	ESL
Semivolatile Organic Compounds		
NAPHTHALENE	0.017	ESL
Inorganic Compounds		
ARSENIC	0.036	Aquatic Protection
IRON	0.3	secondary MCL
MANGANESE	0.05	secondary MCL
ZINC	0.081	ESL

Notes:
COC - Chemical of Concern
ESL - Water Board Environmental Screening Level
MCL - California Department of Health Services Maximum Contaminant Level
RBTL - Risk Based Threshold Level from Human Health Risk Assessment
Aquatic Protection - Water Board Basin Plan, Marine Water Quality Objective for Arsenic in Surface Waters, 4-day average
mg/L - milligram per liter

CDM

Section 4
Remedial Action Alternatives

In this section of the RAP, the FS is summarized by presenting remedial action alternatives considered in the FS and the basis for the selected action (CDM, 2009b).

Remedial action alternatives were developed using combinations of technologies and process options that passed the screening. These alternatives contain both soil and groundwater treatment options combined to provide Site-wide treatment of contamination.

4.1 Description of Remedial Action Alternatives

The following alternatives were developed from the retained process options (see Appendix B). These options were combined to form alternatives that address groundwater and soil/soil gas contamination rather than presenting separate alternatives for each contaminated media type.

- **Alternative 1 –** No Action
- **Alternative 2 –** Limited Action
- **Alternative 3A –** Vadose Zone Excavation/Active *In-Situ* Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs
- **Alternative 3B –** Vadose Zone Excavation/S-W Source Area Soil Mixing/Active *In-Situ* Groundwater Treatment/Rifkin Excavation /Groundwater Monitoring/LUCs
- **Alternative 3C –** Vadose Zone Excavation/S-W Source Area Excavation/Rifkin Groundwater Extraction and Aboveground Treatment/MNA/Groundwater Monitoring/LUCs
- **Alternative 4A –** Vadose Zone Excavation/Upgradient Interceptor Drain Installation/Passive *In-Situ* Groundwater Treatment/Rifkin Excavation/ Groundwater Monitoring/LUCs
- **Alternative 4B –** Vadose Zone Excavation/Upgradient Interceptor Drain Installation/Active *In-Situ* Groundwater Treatment/Rifkin Excavation/ Groundwater Monitoring/LUCs
- **Alternative 5A –** Vadose Zone Excavation/Excavation Upgradient of Interceptor Drain/Downgradient Interceptor Drain Installation/Passive *In-Situ* Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs

- **Alternative 5B –** Vadose Zone Excavation/Excavation Upgradient of Interceptor Drain/Downgradient Interceptor Drain Installation/Active *In-Situ* Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs

- **Alternative 6 –** Vadose Zone Excavation/Source Area Excavation/MNA/ Groundwater Monitoring/LUCs

- **Alternative 7 –** A-Zone Aquifer Excavation/LUCs

Each alternative is described in detail below.

4.1.1 Alternative 1 – No Action

Alternative 1 would discontinue operations of the existing GWETS and storm water management practices. The Site would be left "as is" after completion of demolition activities in November, retaining the slurry wall and existing paved sections of the Site, and ongoing long-term groundwater monitoring. Under Alternative 1, the raised cap materials would remain on-Site and there would be no immediate cleanup on former Rifkin property. Existing LUCs such as prohibitions on the use of A-zone groundwater as a drinking water source would continue to be applied to future Site development. No new LUCs would be implemented for residual chemical concentration.

4.1.2 Alternative 2 – Limited Action

Under Alternative 2, the IRMs present at the Site, for both S-W and former Rifkin properties, would continue to be managed, including, groundwater elevation monitoring of piezometer pairs along the slurry wall as part of the ongoing long-term groundwater monitoring, GWETS operations and maintenance, and storm water management practices. The existing pavement after completion of demolition activities in November 2007 would be maintained to control infiltration to groundwater. The raised cap materials would remain on-Site. Existing LUCs would be retained and a new set of LUCs would be implemented prohibiting consumptive use of A-zone groundwater from areas where concentrations in extractable groundwater exceed MCLs, restricting subsurface drilling or excavation on the Site, and requiring the use of appropriate personal protective equipment (PPE) for any necessary subsurface work.

4.1.3 Alternative 3A – Vadose Zone Excavation/Active *In-Situ* Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs

Alternative 3A includes several components for addressing contaminated soils and groundwater on both the S-W and former Rifkin properties. Detailed descriptions of these components are presented below and proposed locations for each component are presented graphically on Figure 4-1.

4.1.3.1 Removal of Raised Cap

The raised cap material and old foundations under the raised cap would be removed. Approximately 7,000 cubic yards of debris and soil would be removed and transported to an appropriate disposal/reuse facility. This excavated material is anticipated to contain hazardous waste, which would be transported to a Class I hazardous waste landfill for treatment and disposal.

4.1.3.2 Vadose Zone Excavation

Vadose zone soil on the S-W and former Rifkin properties would be excavated in order to achieve the vadose zone soil cleanup for arsenic of 24 mg/kg on each property. The planned limits of soil excavation extend approximately 285 feet along Horton Street (60 feet on the former Rifkin property and 225 feet on the S-W property) and approximately 330 feet west of Horton Street, or approximately 95,000 square feet. In addition, elevated detections of arsenic in vadose zone soil are present at locations outside these limits, including SA-AH-01 (110 mg/kg), SB-7AB (130 mg/kg), CDM-SB50 (200 mg/kg), and SA-BH-04 (211 mg/kg). Vadose zone soil surrounding these locations would also be removed to a radius of 10 feet surrounding each location. These four locations are presented on Figure 4-1.

The vadose zone soil would be excavated to an average depth of approximately 7.5 feet, the approximate depth to groundwater across this area. Approximately, 26,500 cubic yards of vadose zone soil across the Site would be excavated and transported to and disposed at an appropriate landfill. This excavated soil is anticipated to contain hazardous waste, which would be transported to a Class I hazardous waste landfill for treatment and disposal.

Confirmation sampling and analysis would be conducted to confirm that the vadose zone soil cleanup goal for arsenic is met. In order to meet this goal, additional, excavation beyond the limits presented above may be needed.

4.1.3.3 Backfill, Compaction, Grading, and Installation of Cover

All areas undergoing excavation would be backfilled to grade with fill material, compacted, and graded for storm water management. In order to control infiltration into groundwater, the backfill areas would be re-paved and/or vegetated and would direct water runoff along the Site surface towards the Temescal Creek channel.

4.1.3.4 Active Groundwater Treatment System

Groundwater would pass through slurry wall breaches and be treated through an *In-Situ* treatment system through precipitation, coagulation, and flocculation systems. At each slurry wall breach location, shown on Figure 4-1, would be formed through the existing slurry wall. Breaching would be accomplished by installing the system into the barrier, and sealing the space between the system and the barrier wall with flowable low-permeability backfill.

An *in-situ* active treatment system would be installed at each breach of the slurry wall. The conceptual design of the active treatment system involves the following treatment steps:

- Groundwater would flow into a 25-ft tall drainage maintenance structure through multiple pipes that span the height of the aquifer at the gate.
- Groundwater would be aerated via flow from an air compressor located above ground.
- Ferric chloride, which reacts with dissolved arsenic to form co-precipitants, would be added to the water in the aeration basin through a meter pump and tank.
- Organic polymer to assist with flocculation and settling would be added to the water in the aeration basin through a metering pump and tank.
- Groundwater would flow into one or two additional maintenance structures, where precipitants have sufficient residence time to settle out.
- Treated groundwater would flow out of the settling basins through another series of pipes, and into a gravel distribution trench.

A groundwater flow and fate and transport model was used to develop the design flow rates and arsenic concentrations at these breaches. The model results are presented in Appendix B of the FS.

In order to evaluate the effectiveness of the system, groundwater monitoring wells would be placed within and downgradient of the system. Monitoring of these wells is further discussed below.

4.1.3.5 Extending the Existing Slurry Wall

A slurry wall extension would be constructed in locations shown on Figure 4-1 in order to capture the existing plume that has been identified to the south of the existing slurry wall. The slurry wall extension would be approximately 340 linear feet and tie back into the southern end of the existing slurry wall**.**

A breach in the existing slurry wall near this extension, as shown on Figure 4-1, would be installed to prevent mounding and facilitate impacted groundwater between the existing and extended slurry wall system to migrate across the Site and toward the active groundwater treatment systems at the northern slurry wall breaches.

4.1.3.6 LUCs

LUCs would be established to maintain the long-term permanence of this remedy and to control future human exposure. These LUCs would prohibit the use of A-zone groundwater beneath the Site; restrict the future land use on the S-W portion of the Site; and facilitate continued access to and operation and maintenance of remediation

and monitoring facilities on the Site. LUCs on the former Rifkin property would not preclude proposed redevelopment plan for the former Rifkin property, which includes a high-rise tower option with installation of piles and pile caps.

4.1.3.7 Former Rifkin Property Remedial Actions

Under Alternative 3A, remedial actions on the former Rifkin property would consist of: excavation of vadose zone soils above background (as discussed above), excavation of impacted saturated soils, breaching of existing slurry wall along the south end of the former Rifkin property, installation of two interceptor trenches with associated membrane barriers to control hydraulic gradient on the former Rifkin property by directing groundwater flow toward the S-W property, and groundwater monitoring to support the effectiveness of these interceptor trenches. As part of this alternative, a contingency would be to pump from the trench systems, if needed, to direct groundwater flow toward the S-W property. The proposed redevelopment plan for the former Rifkin property, which includes a high-rise tower option with installation of piles and pile caps, is not inconsistent with, and would not impede implementation or long-term operations, maintenance, and monitoring (OM&M) of this alternative.

Excavation of vadose zone soils with arsenic concentrations greater than 24 mg/kg is included within the 95,000 square-foot area discussed above. Saturated zone soils within the portion of the source area located on the former Rifkin property, estimated to be present to a depth of approximately 18 feet bgs, would be excavated as shown on Figure 4-1. This excavated soil is anticipated to contain hazardous waste, which would be transported to a Class I hazardous waste landfill for treatment and disposal. In addition, saturated zone soils in areas with documented VOCs in soil gas concentrations above the cleanup goals, outside of the arsenic source area, would be excavated to address any soil vapor issues. This saturated soil volume has been estimated to be approximately 5,400 additional cubic yards.

All areas undergoing excavation would be backfilled with low-permeability fill material (approximately 0.283 ft/day under this alternative), compacted, and graded for storm water management. An asphalt cover would be placed over these areas and the area would be returned to current use as a parking lot. The cover would prevent infiltration into groundwater.

Based on the proposed redevelopment plan for the former Rifkin property, it is anticipated that for the high-rise tower option up to 4,000 cubic yards of vadose and saturated zone soils could be excavated during installation of piles and pile caps. For soil excavated and removed for Site development that requires increased handling and disposal due to concentrations of arsenic or other COCs, S-W would be responsible for reimbursement to Novartis of the incremental costs. This incremental increase in this operation is considered part of this alternative and S-W would prepare a risk management plan stating their responsibilities.

The existing slurry wall along the south side of the former Rifkin property along the boundary with the S-W property would be breached and replaced with a high permeability interceptor trench. The interceptor trench would be located on the S-W property and be designed to capture and redirect groundwater flow from S-W property away from the former Rifkin property. The trench would be approximately 325 feet long, extend to approximately 18 feet bgs, and be designed to maintain a hydraulic gradient (as demonstrated by potentiometric data collected from both the S-W and former Rifkin properties) away from former Rifkin property, other than that within the drain itself. A second interceptor drain approximately 150 linear feet in length would be installed to capture and redirect flow from the B-line on the former Rifkin property and onto the S-W property.

These trenches are designed to maintain hydraulic gradient of impacted groundwater away from and minimize potential arsenic mass migration to the former Rifkin property. Based on this design basis, the trenches would be approximately 30 inches wide, approximately 18 feet deep and be located as shown on Figure 4-1. The trenches would be backfilled with 3/8 inch minus material and contain a basal perforated pipe to reduce flow resistance from the backfill material. With this design, the trenches would have an effective permeability of approximately 500 ft/day. Soil excavated from the installation of these trenches is anticipated to contain hazardous waste, which would be transported to a Class I hazardous waste landfill for treatment and disposal.

4.1.3.8 Groundwater Monitoring and MNA of Organic COCs

Groundwater monitoring would be performed after implementation of this alternative. The groundwater monitoring program would consist of three parts, demonstrating the overall effectiveness of the remedy, monitoring the performance of the active treatment systems, and demonstrating hydraulic containment and arsenic concentrations in the interceptor trenches on the former Rifkin property.

Overall effectiveness of the remedy would be demonstrated through groundwater samples collected at upgradient and downgradient points along the existing slurry wall as well as at the drain of the interceptor trenches on the former Rifkin property.

Through sampling and analysis of groundwater, trends in the changes in COC concentrations in groundwater would be demonstrated. These monitoring data would be used to evaluate the effectiveness of the remedy outlined in Alternative 3A, and would serve as a demonstration over time of MNA of all organic COCs through comparison with Site data collected prior to remedial action implementation. This comparison would be conducted annually and summarized as part of the five-year review of the S-W property following completion of remedial action.

The performance of the active treatment system would be demonstrated through the collection and evaluation of groundwater samples from wells immediately upgradient and downgradient of the active system.

4.1.3.9 Operations, Maintenance, and Monitoring of Installed Components

This alternative includes long-term operations, maintenance, and monitoring (OM&M) of several installed components, including the surface cover, groundwater treatment system, slurry wall and/or breach system, interceptor trenches and/or drains, groundwater monitoring well network, and/or LUCs. As such, this alternative would include an OM&M plan, OM&M agreement with Site property owners, and financial assurance to DTSC for continued OM&M of these components.

4.1.4 Alternative 3B – Vadose Zone Excavation/Source Area Soil Mixing/Active *In-Situ* Groundwater Treatment/Rifkin Excavation /Groundwater Monitoring/LUCs

Alternative 3B is the same as Alternative 3A with the exception of the inclusion of soil mixing on the S-W property. The proposed layout of all Alternative 3B components is presented graphically on Figure 4-2.

4.1.4.1 Soil Mixing

In-situ soil mixing, as described in Section 2.5.2.2, would be implemented in the A-zone saturated soil within the source area on the S-W property. Soil mixing on the S-W property will complement the excavation performed on the former Rifkin property. The A-zone saturated soils in the source area would be mixed to a depth of approximately 25 feet bgs and would be tied into the A/B aquitard. The final soil mix will have a permeability of approximately 0.000283 ft/day under this alternative. Since soil mixing increases the total soil volume through introduction of the cement mix, the volume of expanded treated soil within the source mixing area would be excavated, transported to, and disposed at an appropriate landfill consistent with the procedures for the vadose zone excavation. The expanded treated soil located above the groundwater table would not be left in place to serve as backfill for the vadose zone, as it would contain total arsenic concentrations above the remediation goal for vadose zone soil.

A groundwater flow and fate and transport model was used to develop the design flow rates and arsenic concentrations at these breaches. The model results are presented in Appendix B of the FS.

4.1.5 Alternative 3C - Vadose Zone Excavation/S-W Source Area Excavation/Rifkin Groundwater Extraction and Aboveground Treatment/MNA/Groundwater Monitoring/LUCs

Alternative 3C includes the following components for addressing soil and groundwater contamination, as they were described under Alternative 3A:

- Removal of Raised Cap
- Vadose Zone Excavation
- Installation of a Cover

- Extending and Breaching Existing Slurry Wall
- LUCs
- Groundwater Monitoring and MNA of COCs
- Operations, Maintenance, and Monitoring of Installed Components

For the S-W property, Alternative 3C would also include source area excavation; breaching and extending the existing slurry wall; and, MNA for arsenic and other COCs as described below.

For the former Rifkin property, Alternative 3C includes installation of an interceptor trench, located on the S-W property, adjacent to the east/west S-W/Rifkin property boundary. A membrane barrier would be placed on one side of the trench, along the property boundary, to prevent groundwater flow toward the former Rifkin property. The trench would have a similar construction to those presented in Alternative 3A. The trench would be approximately 30 inches wide, approximately 25 feet deep and be located as shown on Figure 4-3 The trench would be backfilled with 3/8 inch minus material and contain a basal perforated pipe to reduce flow resistance from the backfill material. With this design, the trench would have an effective permeability of approximately 500 ft/day.

Alternative 3C also contains provisions for operating and maintaining a GWETS, as described under Alternative 2, however the groundwater extraction and treatment would apply only to groundwater extracted from an extraction well on the former Rifkin property and an extraction well on the S-W property. The two extraction wells would contain the arsenic plume underlying the former Rifkin property, as described below.

The proposed layout of Alternative 3C is presented graphically in Figure 4-3.

4.1.5.1 Source Area Excavation

Alternative 3C includes excavation of source area saturated soils on the S-W property. The limits of this excavation are illustrated on Figure 4-3. The source area saturated soils would be removed down to the A/B aquitard (approximately 25 feet bgs) on the S-W property, corresponding to approximately 25,300 cubic yards of saturated soil. The source area excavation would remove source material to groundwater in order to support natural attenuation of the downgradient arsenic concentrations. The MNA sampling would demonstrate the naturally occurring attenuation of arsenic and other COCs in the groundwater over time following the source removal.

During backfill operations of the saturated zone, a reagent (e.g., organic-based tannin or inorganic powdered sulphite) would be added with the backfill material to minimize the potential adverse affects to arsenic sulfides present in the subsurface. The purpose of the reagent would be to act as an oxygen scavenger so that a minimal amount of dissolved oxygen is introduced to the subsurface. As shown on Figure 4-3, the majority of the areas undergoing excavation would be backfilled with low-permeability fill material (approximately 0.283 ft/day under this alternative),

compacted, and graded for storm water management. The remaining area would be backfilled with high-permeability fill material (approximately 28.3 feet/day for this alternative). The high-permeability fill material would be placed downgradient of the interceptor trench and would serve to collect and distribute groundwater into the surrounding, natural formation.

4.1.5.2 Continued Groundwater Extraction and Treatment for Former Rifkin Property

Active groundwater extraction underlying the former Rifkin property would continue, with aboveground treatment of the extracted water at a treatment facility relocated to the northeast corner of the S-W property, adjacent to Horton Street and former Rifkin property. This continued groundwater extraction would continue to prevent further migration of dissolved arsenic plume on the former Rifkin property.

Groundwater elevation monitoring at the Site would continue, as the means to demonstrate effectiveness of the barrier/trench/extraction system on maintaining an inward gradient towards the S-W property along the east/west S-W/Rifkin property boundary. As part of this alternative, a contingency would be to increase extraction rates from the trench/extraction system and/or install additional extraction points, if needed, to direct groundwater flow toward the S-W property.

The proposed redevelopment plan for the former Rifkin property, which includes a high-rise tower option with installation of piles and pile caps, is not inconsistent with, and would not impede implementation or long-term operations, maintenance, and monitoring (OM&M) of this alternative.

Based on the proposed redevelopment plan for the former Rifkin property, it is anticipated that for the high-rise tower option up to 4,000 cubic yards of vadose and saturated zone soils could be excavated during installation of piles and pile caps. For soil excavated and removed for Site development that requires increased handling and disposal due to concentrations of arsenic or other COCs, S-W would be responsible for reimbursement to Novartis of the incremental costs. This incremental increase in this operation is considered part of this alternative and S-W would prepare a risk management plan stating their responsibilities.

4.1.5.3 Breaching and Extending the Existing Slurry Wall

A slurry wall extension would be constructed in locations shown on Figure 4-3 in order to have the existing plume that has been identified to the south of the existing slurry wall migrate through the Site, toward the breaches in the slurry wall. The slurry wall extension would be approximately 340 linear feet along the western property line toward Sherwin Avenue. Unlike Alternatives 3A and 3B which address S-W source material through containment, Alternative 3C removes source material from the S-W property. Therefore, the slurry wall extension under this alternative does not need to tie back into the southern edge of the existing slurry wall.

In order to restore groundwater flow across the S-W property, the existing slurry wall would be breached at locations shown on Figure 4-3. Breaching would be accomplished by removing and replacing the low-permeability materials in the wall with high-permeability fill.

A breach in the existing slurry wall near this extension, as shown on Figure 4-3, would be installed to prevent mounding of groundwater upgradient of this extension and to facilitate impacted groundwater south of the existing slurry wall and east of the extension to migrate across the Site before exiting the Site at the northern slurry wall breaches. This extended migration across the Site is designed to promote additional attenuation of COCs present in the area of the Site, specifically arsenic, prior to migration to downgradient properties.

A groundwater flow model was used to develop the design flow rates at these breaches. Alternative 3C does not include treatment at the breaches and hence does not require a groundwater fate and transport analysis for design of the breaches. The model results are presented in Appendix B of the FS.

4.1.5.4 MNA of COCs in Groundwater

Under Alternative 3C, COC concentration data in groundwater collected in MNA sampling and analysis would provide lines of evidence supporting the occurrence of attenuation of COCs in groundwater. Sampling and analysis of groundwater samples upgradient and downgradient of the existing slurry wall would be performed after completion of source area excavation. This data set would be compared to historical groundwater data to demonstrate long-term decreasing trends in COC concentrations over time across the Site and in downgradient, off-site groundwater. As part of this alternative, a contingency to treat groundwater, if needed, would be implemented in the event that COC concentrations migrating off-site through the slurry wall breaches are not attenuating to the cleanup goals in a reasonable timeframe.

4.1.5.5 LUCs and OM&M Plan

S-W understands that some additional LUCs are needed for Alternative 3C, as compared to Alternative 3A. S-W has access from the current owner to operate, monitor, and maintain (OM&M) a groundwater extraction system on the former Rifkin property. The proposed redevelopment plan for the former Rifkin property, which includes a high-rise tower option with installation of piles and pile caps, is not inconsistent with, and would not impede implementation or long-term OM&M of this system. However, DTSC has advised S-W that the following LUCs will be required for the S-W property and the former Rifkin property to assure DTSC that potential future changes in land use and property ownership do not impair the effectiveness of this alternative:

- Land use restrictions to facilitate OM&M of a groundwater extraction system on the former Rifkin property;

- Land use restriction to facilitate OM&M of a groundwater conveyance system on the former Rifkin property and treatment system on the S-W property;

- Land use restrictions to prevent interference with and operation and maintenance of a groundwater monitoring well network for the Site; and

- Land use restrictions to prevent interference with and operation and maintenance of interceptor trench, slurry wall and breach systems on the S-W property.

In addition, DTSC has advised S-W that an operations, maintenance, and monitoring (OM&M) agreement with financial assurance for OM&M of the groundwater extraction, conveyance and treatment systems and for any other installed feature incorporated in the alternative will be required. The OM&M agreement would apply for both the S-W property and the former Rifkin property. Financial assurance for implementation of the OM&M agreement for the Site would be provided by S-W.

4.1.6 Alternative 4A – Vadose Zone Excavation/Upgradient Interceptor Drain Installation/Passive *In-Situ* Groundwater Treatment/Rifkin Excavation/ Groundwater Monitoring/LUCs

Alternative 4A includes the following components for addressing soil and groundwater contamination, as they were described under Alternative 3A:

- Removal of Raised Cap
- Vadose Zone Excavation
- Installation of a Cover
- Extending and Breaching Existing Slurry Wall
- LUCs
- Groundwater Monitoring and MNA of COCs
- Operations, Maintenance, and Monitoring of Installed Components

In addition to these common components, Alternative 4A also includes construction of an interceptor drain to capture and direct clean groundwater flow upgradient of the source area. The proposed layout of all Alternative 4A components is presented graphically on Figure 4-4.

A groundwater flow and fate and transport model was used to develop the design flow rates and arsenic concentrations at these breaches and the design flow rates for the interceptor drain. The model results are presented in Appendix B of the FS.

4.1.6.1 Upgradient Interceptor Drain

Alternative 4A includes installation of an interceptor drain to collect groundwater upgradient of the S-W property and route this water around the impacted soils into areas downgradient of the Site. The upgradient interceptor drain would extend along all but the western side of the existing slurry wall and down to tie into the new extension of the existing slurry wall (See Figure 4-4 of the FS in Appendix B) for a

total length of 1575 linear feet. The drain design would consist of a 30-inch nominal drain excavated approximately 25 feet to the A/B aquitard. The drain would contain a membrane liner and concrete barrier on one side, prohibiting collection of any impacted groundwater flow from the S-W property. The interceptor drain would replace the slurry wall sections that border the former Rifkin property. The drain would be backfilled with 3/8 inch minus material and would contain a basal perforated pipe to reduce flow resistance from the backfill material. With this design, the trench would have an effective permeability of approximately 500 ft/day.

4.1.6.2 Passive Treatment System

The existing slurry wall would be breached via caisson installation. The caissons filled with reactive media assumed to consist of 20% zero-valent iron (ZVI) and 80% playground sand based on the Phase II treatability study. The reactive caissons would be surrounded by a corridor of caissons backfilled with bentonite or similar low-permeability material that would act as gates to funnel groundwater through the entire length of the treatment zone.

Gravel or similar high-permeability material would be used to backfill additional caissons located immediately upgradient and downgradient of the reactive caissons, to provide mixing and improved distribution of groundwater through the reactive gate.

Each of these backfills would be installed as flowable slurry with high pressure, so as to avoid the formation of voids during backfill when the caisson casing is removed. The number and configuration of the caissons depends on expected influent flow rates and concentrations at each location in each alternative.

The conceptual design and cost estimate for this type of treatment is based on 30 years of operation. However, because of the relative lack of long-term performance data for this type of removal technology, there is uncertainty in the long-term performance. Therefore, some maintenance and rehabilitation costs are included in the cost estimate as a contingency measure.

4.1.6.3 Rifkin Excavation

Under Alternative 4A, all impacted vadose and saturated soil material on the former Rifkin property upgradient of interceptor drain would be excavated, up to 15 feet bgs. The volume of saturated soil contained within the limits of this excavation as shown on Figure 4-4 would be approximately 14,300 cubic yards. The excavation would encompass that portion of former Rifkin property extending from the S-W property north to the B-line. The excavated area would be backfilled with low-permeability fill material (approximately 0.283 ft/day under this alternative).

This excavation would effectively remove all contaminated source material in contact with A-zone groundwater. Installation of the upgradient interceptor drain would prevent migration of impacted groundwater from the S-W property to the former Rifkin property.

4.1.7 Alternative 4B – Vadose Zone Excavation/Upgradient Interceptor Drain Installation/Active *In-Situ* Groundwater Treatment/Rifkin Excavation/ Groundwater Monitoring/LUCs

Alternative 4B is identical to Alternative 4A except that downgradient groundwater would be treated with an active treatment system, as presented under Alternative 3A. The proposed layout of all Alternative 4B components is presented graphically on Figure 4-5.

The active system for Alternative 4B would be similar in conceptual design as that presented for Alternative 3A.

4.1.8 Alternative 5A – Vadose Zone Excavation/Excavation Upgradient of Interceptor Drain/Downgradient Interceptor Drain Installation/Passive *In-Situ* Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs

Alternative 5A includes several components for addressing soil and groundwater contamination on both S-W and former Rifkin properties described under Alternatives 3A and/or 4A as listed below:

- Removal of Raised Cap
- Vadose Zone Excavation
- Extending and Breaching Existing Slurry Wall
- Passive Groundwater Treatment
- Installation of a Cover
- Rifkin Excavation
- LUCs
- Groundwater Monitoring and MNA of COCs
- Operations, Maintenance, and Monitoring of Installed Components

Alternative 5A also includes construction of an interceptor drain to capture and direct clean groundwater flow downgradient of the source area. The proposed layout of all Alternative 5A components is presented graphically on Figure 4-6.

A groundwater flow and fate and transport model was used to develop the design flow rates and arsenic concentrations at these breaches and the design flow rates for the interceptor drain. The model results are presented in Appendix B of the FS.

4.1.8.1 Saturated Soil Excavation

Under Alternative 5A, all impacted, saturated soil impacted upgradient of the interceptor drain would be excavated, to 25 feet bgs under S-W property and 15 feet bgs on the former Rifkin property. The limits of this excavation are shown on Figure 4-6. The volume of saturated soils removed within these excavations would

correspond to 14,300 cubic yards on the former Rifkin property and 38,600 cubic yards on the S-W property. Excavated areas would be backfilled with clean material, compacted and graded for storm water control. The excavated area would be backfilled with low-permeability fill material (approximately 0.283 ft/day under this alternative) on the former Rifkin property and lower-permeability fill material (approximately 0.0283 ft/day under this alternative) on the S-W property.

4.1.8.2 Downgradient Interceptor Drain

Alternative 5A includes installation of an interceptor drain to collect groundwater downgradient of the Site source areas and route this water downgradient for treatment. The downgradient interceptor drain would extend along the western side of the former Rifkin property and the existing raised cap area and down to tie into the extension of the existing slurry wall for a total length of 1,100 linear feet. The drain design would consist of a 30 inch nominal drain excavated approximately 25 feet to the A/B aquitard. The drain would contain a membrane liner and concrete barrier on one side, prohibiting collection of any impacted groundwater flow from the S-W property. The drain would be backfilled with 3/8 inch minus material and would also contain a basal perforated pipe to reduce flow resistance from the backfill material. With this design, the trench would have an effective permeability of approximately 500 ft/day.

4.1.9 Alternative 5B – Vadose Zone Excavation/Excavation Upgradient of Interceptor Drain/Downgradient Interceptor Drain Installation/Active *In-Situ* Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs

Alternative 5B is identical to Alternative 5A except that downgradient groundwater would be treated via *in-situ* active treatment system described in detail under Alternative 3A. The proposed layout of all Alternative 5B components is presented graphically on Figure 4-7.

4.1.10 Alternative 6 – Vadose Zone Excavation/Source Area Excavation/MNA/Groundwater Monitoring/LUCs

Alternative 6 includes the same components for addressing soil and groundwater contamination described under Alternatives 3A listed below:

- Removal of Raised Cap
- Vadose Zone Excavation
- Installation of a Cover
- Groundwater Monitoring and MNA of COCs
- Operations, Maintenance, and Monitoring of Installed Components

Alternative 6 also includes excavation of source area soils on the S-W and former Rifkin properties and extending and breaching the slurry wall. Alternative 6 also includes MNA for COCs, similar to Alternative 3C. In addition, Alternative 6

contains a contingency plan including a vapor intrusion control system for the former Rifkin property to mitigate potential exposure pathways should future property development include erection of buildings over areas with elevated levels of VOCs in soil gas. The proposed layout of all Alternative 6 components is presented graphically on Figure 5-8.

For the former Rifkin property, Alternative 6 includes installation of an interceptor trench, located on the S-W property, adjacent to the east/west S-W/Rifkin property boundary, as described in Alternative 3C. A membrane barrier would be placed on one side of the trench, along the property boundary, to prevent groundwater flow toward the former Rifkin property. The trench would have a similar construction to those presented in Alternative 3A. The trench would be approximately 30 inches wide, extend to the top of the aquitard, approximately 25 feet deep, and be located as shown on Figure 4-8. The trench would be backfilled with 3/8 inch minus material and contain a basal perforated pipe to reduce flow resistance from the backfill material. With this design, the trench would have an effective permeability of approximately 500 ft/day.

4.1.10.1 Source Area Excavation

In addition to vadose zone excavation, Alternative 6 includes excavation of source area saturated soils on the S-W and former Rifkin properties. The limits of these excavations are shown on Figure 4-8. The source area saturated soils would be removed down to the A/B aquitard (approximately 25 feet bgs) on the S-W property and to 18 feet bgs on the former Rifkin property (Section 4.2.3.1), corresponding to approximately 25,300 and 4,600 cubic yards of saturated soil on each property, respectively.

The source area excavation would remove source material to groundwater in order to support natural attenuation of the downgradient arsenic and other COC concentrations. Saturated soils in areas with documented VOCs in soil gas concentrations above the PRGs, outside of the source area, would be addressed through MNA The MNA sampling described below would demonstrate the naturally occurring attenuation of arsenic and other COCs in the groundwater over time following the source removal.

During backfill operations of the saturated zone, a reagent (e.g., organic-based tannin or inorganic powdered sulphite) would be added with the backfill material to minimize the potential adverse affects to arsenic sulfides present in the subsurface. The purpose of the reagent would be to act as an oxygen scavenger so that a minimal amount of dissolved oxygen is introduced to the subsurface.

As shown on Figure 4-8, the majority of the areas undergoing excavation would be backfilled with low-permeability fill material (approximately 0.283 ft/day under this alternative), compacted, and graded for storm water management. The remaining area would be backfilled with high-permeability fill material (approximately 28.3 feet/day for this alternative). The high-permeability fill material would be placed

downgradient of the interceptor trench and would serve to collect and distribute groundwater into the surrounding, natural formation. As part of this alternative, a contingency would be to pump from the high-permeability fill material and/or trench, if needed, to direct groundwater flow toward the S-W property. As such, backfill design considerations for both the S-W property and the former Rifkin property would be further assessed as part of remedial design of this alternative.

4.1.10.2 Breaching and Extending the Existing Slurry Wall

As presented in Alternative 3C, a slurry wall extension would be constructed in locations shown on Figure 4-8 in order to have the existing plume that has been identified to the south of the existing slurry wall migrate through the Site, toward the breaches in the slurry wall. The slurry wall would be constructed in accordance with procedures described in Section 2.4.5. The slurry wall extension would be approximately 340 linear feet along the western property line toward Sherwin Avenue. Unlike Alternatives 3A and 3B which address source material through containment, Alternative 6 does not. Therefore, the slurry wall extension under this alternative does not need to tie back into the southern end of the existing slurry wall**.**

A breach in the existing slurry wall near this extension, as shown on Figure 4-8, would be installed to prevent mounding of groundwater upgradient of this extension and to facilitate impacted groundwater south of the existing slurry wall and east of the extension to migrate across the Site before exiting the Site at the northern slurry wall breaches. This extended migration across the Site is designed to promote additional attenuation of COCs present in the area of the Site, specifically arsenic, prior to migration to downgradient properties, as discussed below.

A groundwater flow model was used to develop the design flow rates at these breaches. Alternative 6 does not include treatment at the breaches and hence does not require a groundwater fate and transport analysis for design of the breaches. The model results are presented in Appendix B of the FS.

4.1.10.3 MNA of COCs in Groundwater

As in Alternative 3C, COC concentration data in groundwater collected in MNA sampling and analysis would provide lines of evidence supporting the occurrence of attenuation of COCs in groundwater. Sampling and analysis of groundwater samples upgradient and downgradient of the existing slurry wall would be performed after completion of source area excavation. This data set would be compared to historical groundwater data to demonstrate long-term decreasing trends in COC concentrations over time across the Site and in downgradient, off-site groundwater. As part of this alternative, a contingency to treat groundwater, if needed, would be implemented in the event that COC concentrations migrating off-site through the slurry wall breaches or across the former Rifkin property are not attenuating to the cleanup goals in a reasonable timeframe.

4.1.10.4 LUCs

LUCs would be established to maintain the long-term permanence of this remedy and to control future human exposure. These LUCs would prohibit the use of A-zone groundwater beneath the Site; restrict the future land use on the S-W portion of the Site; and facilitate continued access to and operation and maintenance of remediation and monitoring facilities on the Site. LUCs on the former Rifkin property would not preclude proposed redevelopment plan for the former Rifkin property, which includes a high-rise tower option with installation of piles and pile caps.

4.1.11 Alternative 7 – A-Zone Aquifer Excavation /LUCs

Alternative 7 includes the following components in common with Alternative 3A and 4A:

- Removal of Raised Cap
- Installation of a Cover
- LUCs
- Operations, Maintenance, and Monitoring of Installed Components

Alternative 7 also includes excavation of all impacted, saturated A-zone saturated soil from both the S-W property and former Rifkin properties vertically to the A/B aquitard and laterally to the 24 mg/kg background arsenic concentration and/or 0.036 mg/L arsenic concentration for aquatic protection. An estimated 194,000 cubic yards of vadose zone and saturated soils would be excavated, transported off-site, and replaced with clean soil.

The A/B aquitard would remain in place to protect the integrity of the B-zone aquifer. Groundwater monitoring would be postponed until completion of remedial activities. Groundwater monitoring would resume with installation of several new (replacement) wells as necessary and implementation of the groundwater monitoring plan. With the entire affected A-zone aquifer removed and replaced, groundwater monitoring would only be required for a maximum of two or three annual monitoring events to demonstrate residual concentrations in groundwater. The removal of the A-zone aquifer does not include MNA monitoring.

The proposed layout of all Alternative 7 components is presented graphically on Figure 4-9.

4.2 Evaluation of Remedial Action Alternatives

Based on a screening evaluation against effectiveness, implementability, and cost, the following alternatives were retained for detailed analysis:

- **Alternative 1 –** No Action

- **Alternative 2 –** Limited Action

- **Alternative 3A –** Vadose Zone Excavation/Active *In-Situ* Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs

- **Alternative 3B –** Vadose Zone Excavation/S-W Source Area Soil Mixing/Active *In-Situ* Groundwater Treatment/Rifkin Excavation /Groundwater Monitoring/LUCs

- **Alternative 3C –** Vadose Zone Excavation/ S-W Source Area Excavation/Rifkin Groundwater Extraction and Aboveground Treatment/MNA/Groundwater Monitoring/LUCs

- **Alternative 6 –** Vadose Zone Excavation/Source Area Excavation/MNA/ Groundwater Monitoring/LUCs

- **Alternative 7 –** A-Zone Aquifer Excavation/LUCs

A detailed and comparative analysis of these retained alternatives was performed. The comparative analysis is summarized in Table 7-1 of the FS (see Appendix B). This analysis applies nine Federal NCP evaluation criteria to each alternative listed above. These criteria are grouped into the following three categories: threshold criteria, primary balancing criteria, and modifying criteria.

4.2.1 Threshold Criteria

Two threshold criteria relate directly to the statutory compliance of the alternative: (1) overall protection of human health and the environment and (2) compliance with ARARs. A given alternative must meet these criteria to be considered as a remedy.

4.2.1.1 Overall Protection of Human Health and Environment

Under this criterion, the adequacy of the protection afforded by a remedial action must be addressed. How risks will be eliminated, reduced, or controlled through treatment, engineering controls, or ICs must be described.

4.2.1.2 Compliance with ARARs

Under this criterion, the means by which a given remedial alternative will meet the ARARs identified in Section 3 must be established. Compliance with the chemical, location, and action-specific ARARs must be attained by the alternative to be considered as a remedy.

Existing settlement agreement between S-W and Novartis is identified as a TBC. Based on ongoing discussions, S-W and Novartis may renegotiate this agreement and therefore, the provisions of this TBC may change.

4.2.2 Primary Balancing Criteria

Five primary balancing criteria address the technical and cost criteria for each alternative: (1) long-term effectiveness and permanence; (2) reduction of toxicity,

mobility, or volume through treatment; (3) short-term effectiveness; (4) implementability; and (5) cost.

4.2.2.1 Long-Term Effectiveness and Permanence

Under this criterion, the effectiveness and permanence of the remedial action is established in terms of risk remaining at the site after the remedial action. The adequacy and reliability of LUCs required with the alternative are evaluated to determine if appropriate risk management of the treatment residuals or untreated waste is in place.

4.2.2.2 Reduction of Toxicity, Mobility, or Volume through Treatment

Under this criterion, the degree and quantity of contaminant toxicity, mobility, and/or volume reduction by use of the specified treatment is evaluated. The anticipated performance of a treatment technology employed by remedial action in terms of long-term reliability of the treatment process and the type and quantity of treatment residuals is discussed.

4.2.2.3 Short-Term Effectiveness

Under this criterion, the impacts on the community, site workers, and the environment during the construction and implementation phase are evaluated. This phase lasts through the construction phase of the remedial action. The duration until protection is achieved is also considered. In addition to the impacts on human health, the potential adverse environmental impacts during the construction are evaluated.

4.2.2.4 Implementability

Under this criterion, the technical and administrative feasibility of implementing the alternative is evaluated. The availability of needed materials and services is also considered. The technical feasibility considerations include the technical difficulties anticipated in construction, reliability of the selected technology, and ease of implementing the remedy. Administrative feasibility considers coordination of interested parties, as well as any required permits.

4.2.2.5 Cost

Under this criterion, estimates are made of capital costs, engineering expenses, and the present worth of future O&M and periodic costs. Cost estimates are developed according to *A Guide to Developing and Documenting Cost Estimates During the Feasibility Study* (EPA 2000). All alternatives have the same future land use and site development cost components. While flexibility has been incorporated into each alternative for the location of remedial facilities, the selection of cleanup levels, the time frame in which remedial action will be completed, and the project scope and duration must be defined in order to provide a cost estimate. As a result, a number of assumptions must be made to provide cost estimates for the various remedial alternatives. Important assumptions specific to each alternative are summarized in the description of the alternative.

The levels of detail employed in making these estimates are approximate, but are considered appropriate for making choices between alternatives. The information provided in the cost estimate is based on the best available information regarding the anticipated scope of the remedial alternatives. The cost estimate is expected to be within +50/-30 percent of the actual cost. The costs are discussed with respect to the following items:

- Capital costs consist of direct (construction) and indirect (non-construction and overhead) costs.
- O&M costs refer to post-construction cost items necessary to ensure the continued effectiveness of a remedial action and typically consist of long-term labor, power, and material costs.
- Periodic costs include items that are required intermittently at greater than 1-year intervals.

A present worth analysis has been used to normalize all capital, O&M, and periodic costs of a remedial alternative. In this analysis, all capital costs are assumed to be incurred within the first year of implementation. Future O&M and periodic costs are included and reduced by the appropriate future value/present worth discount factor of 3 percent.

4.2.3 Modifying Criteria

Two modifying criteria relate directly to the regulatory and community acceptance of the alternative. These criteria will be addressed by DTSC through the RAP review and approval process.

4.3 Basis for Selected Remedial Action

Based on the individual and comparative analyses performed in the FS, the selected alternative is Alternative 6 - Vadose Zone Excavation/Source Area Excavation MNA/ Groundwater Monitoring/LUCs (CDM, 2009b).

The following summarizes the rationale for selection of Alternative 6 as the preferred alternative:

- It provides for the best combination of overall protection to both human health and the environment, and long-term effectiveness and permanence. It is equal to the other alternatives with respect to the other NCP criteria, excluding cost evaluation.
- It provides the best fit with the RAOs, in particular for minimizing risk to downgradient ecological receptors from off-site groundwater migration. As Alternative 6 removes the source of arsenic to groundwater, it provides for the best assurance for long-term protection of ecological receptors. In addition, the removal of the source will prevent further migration of arsenic onto the former Rifkin property.

- Alternative 6 also does not include long-term operation of a treatment system (aboveground or in place) at the Site. This attribute is favorable as it reduces potential need for future evaluation and intrusive operations/modifications to remedy elements (i.e., removal of sludge, change out of reactive media, rehabilitation of extraction wells, etc.).

- It provides the flexibility with respect to S-W plans for future redevelopment of the facility. Other than Alternative 7, Alternative 6 removes the most impacted soils at the Site and reduces the areas within the Site that require LUCs for future redevelopment.

4.4 State Evaluation Process

The evaluation and selection of Alternative 6 as the preferred remedial alternative through the NCP process complies with State evaluation process identified in California H&SC Section 25356.1(c). The six State evaluation criteria correlate with the nine NCP criteria as presented above. A draft statement of reasons for selection of the preferred alternative, correlating to the six State evaluation criteria, is included in Appendix D. The statement of reasons also proposes a preliminary non-binding apportionment of responsibility for the Site, which is included in Appendix E.

4.4.1 Health and Safety Risks

This criterion evaluates the current and future health and safety risks associated with no remediation and with implementing the preferred alternative. This criterion is fully considered under NCP evaluation criterion of Overall Protection of Human Health and Environment.

4.4.2 Beneficial Uses of Site Resources

This criterion evaluates present and potential future beneficial uses of Site resources. This criterion is fully considered under the NCP criterion of Overall Protection of Human Health and Environment and Compliance with ARARs. In the development of RAOs for this Site (Section 3.2), a Site beneficial uses analysis was conducted.

4.4.3 Effect of Remedial Actions on Groundwater Resources

This criterion evaluates the effect of the preferred alternative on Site groundwater resources. The NCP criterion of Overall Protection of Human Health and Environment and Compliance with ARARs fully incorporate this State criterion.

4.4.4 Site-Specific Characteristics

This State criterion requires remedy selection evaluation to consider Site-specific characteristics. Remedy selection considered all Site-specific characteristics, such as Site geology, hydrogeology, chemicals, and previous remedial actions. Extensive Site characterization has been conducted. This State criterion is fully considered in the NCP criterion of Long-Term Effectiveness and Permanence, Short-Term Effectiveness, and Implementablity.

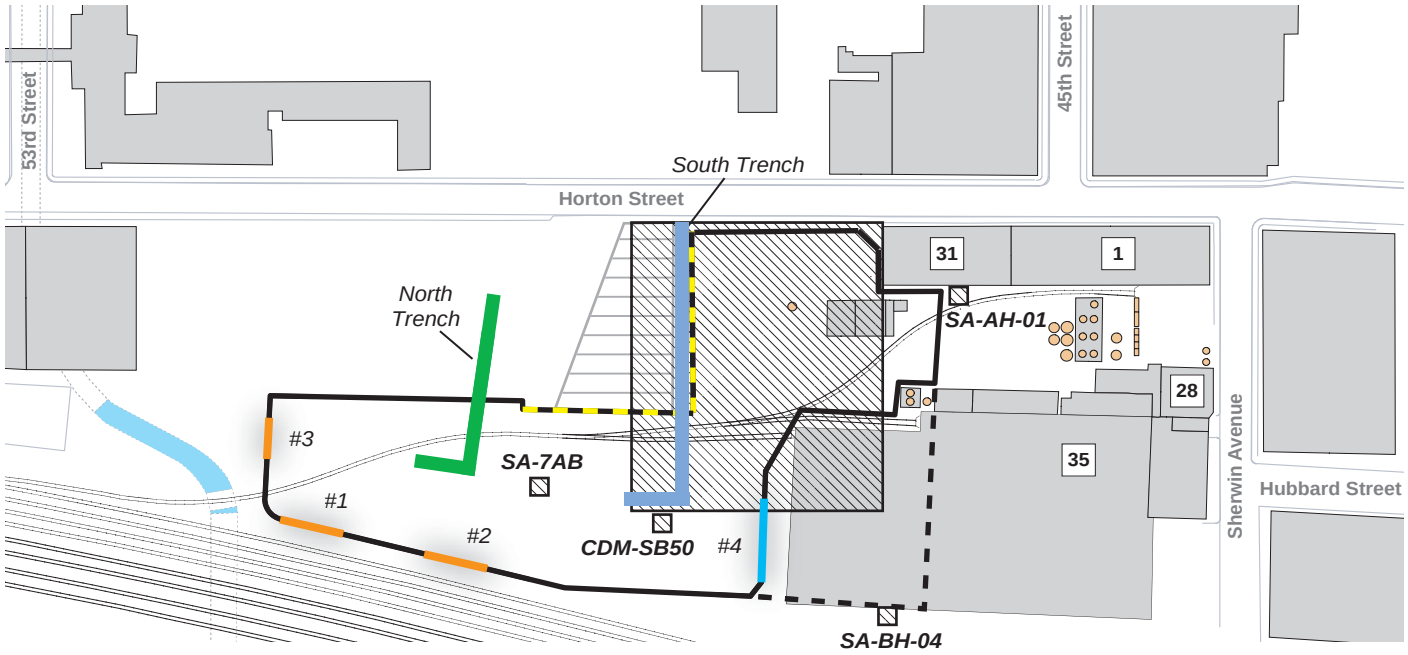
4.4.5 Cost-Effectiveness of Alternative Remedial Action Measures

This criterion evaluates the relative cost-effectiveness of various remediation alternatives in light of their expected success in meeting RAOs. This State criterion is fully considered in the NCP criteria entitled Long-Term Effectiveness and Permanence, and Cost.

4.4.6 Potential Environmental Impacts of Remedial Action

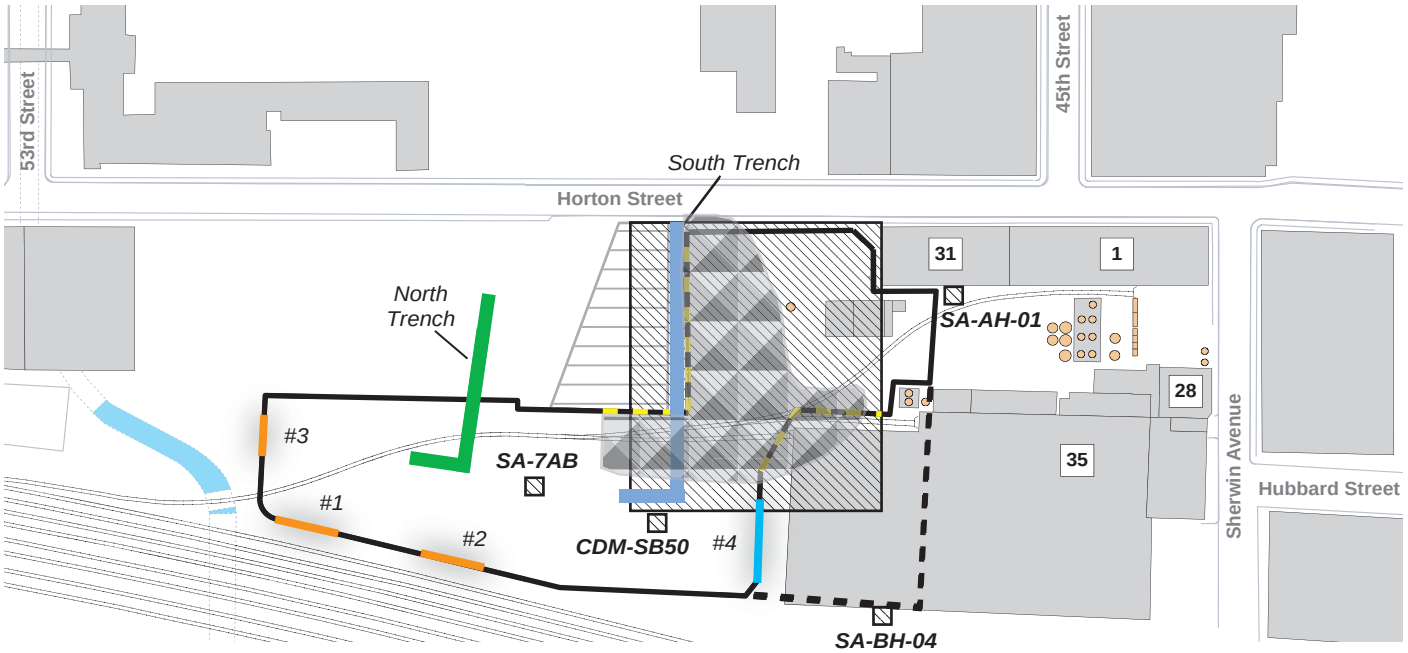
This criterion evaluates the potential environmental impacts of the preferred alternative. The NCP criteria of Short-Term Effectiveness and Long-Term Effectiveness and Permanence consider environmental impacts during and after remedy implementation. In addition, CEQA documentation (see Appendix F) also evaluates environmental impacts from the remedy.

Figure 4-1
Remedial Alternative 3A: Vadose Zone Excavation/Active In-Situ Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs



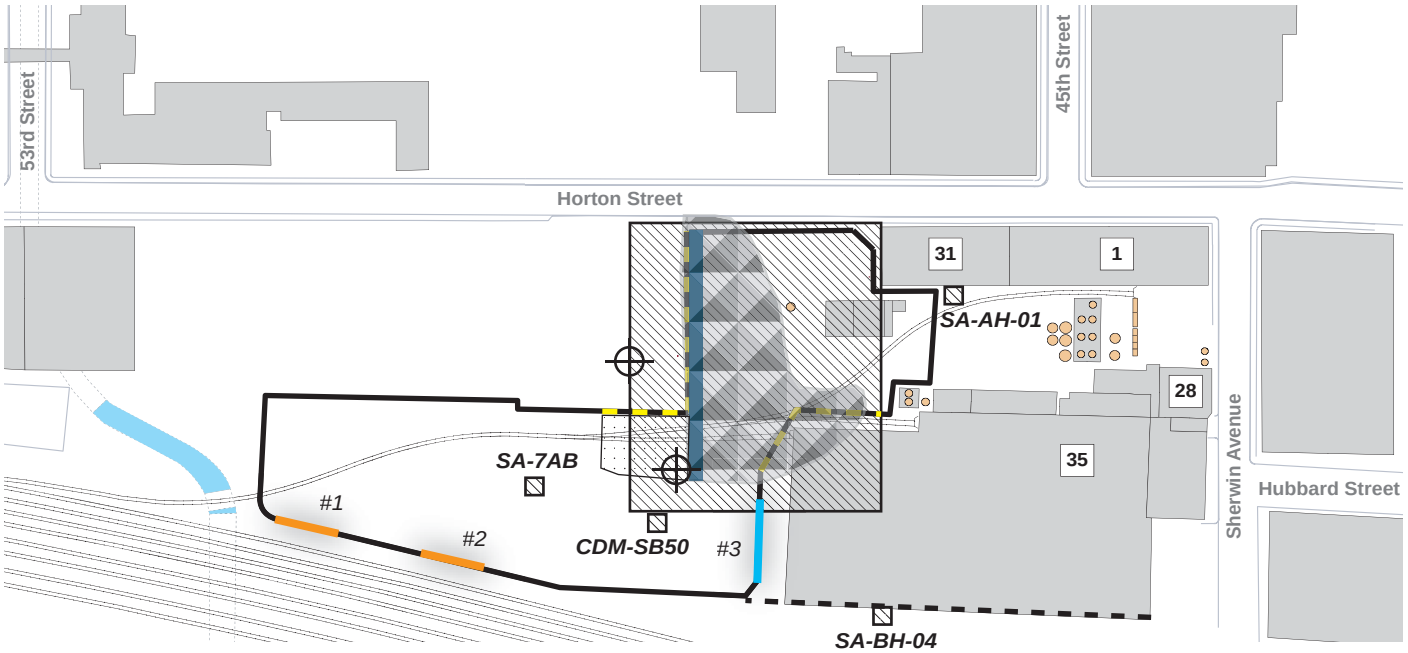
Vadose Zone Soil Excavation
Saturated Soil Excavation on Rifkin
Breach with Active Treatment (#1, #2 & #3)
Gradient Control Trench
Slurry Wall Extension
Breach without Treatment (#4)
Interceptor Trench
Current Slurry Wall
Slurry Wall Removal

Figure 4-2
Remedial Alternative 3B: Vadose Zone Excavation/S-W Source Area Soil Mixing/ Active In-Situ Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs



Saturated Soil Mixing on S-W
Gradient Control Trench
Interceptor Trench
Vadose Zone Soil Excavation
Saturated Soil Excavation on Rifkin
Slurry Wall Extension
Current Slurry Wall
Breach with Active Treatment (#1, #2 & #3)
Breach without Treatment (#4)
Slurry Wall Removal

Figure 4-3
Remedial Alternative 3C: Vadose Zone Excavation/S-W Source Area Excavation/Rifkin Groundwater Extraction and Aboveground Treatment/MNA/Groundwater Monitoring/LUCs



Saturated Soil Excavation on S-W and Low Permeability Backfill

Saturated Soil Excavation on S-W and High Permeability Backfill

Vadose Zone Soil Excavation

Interceptor Trench with Membrane Barrier Along Rifkin Property Boundary

Extraction Well

Slurry Wall Extension

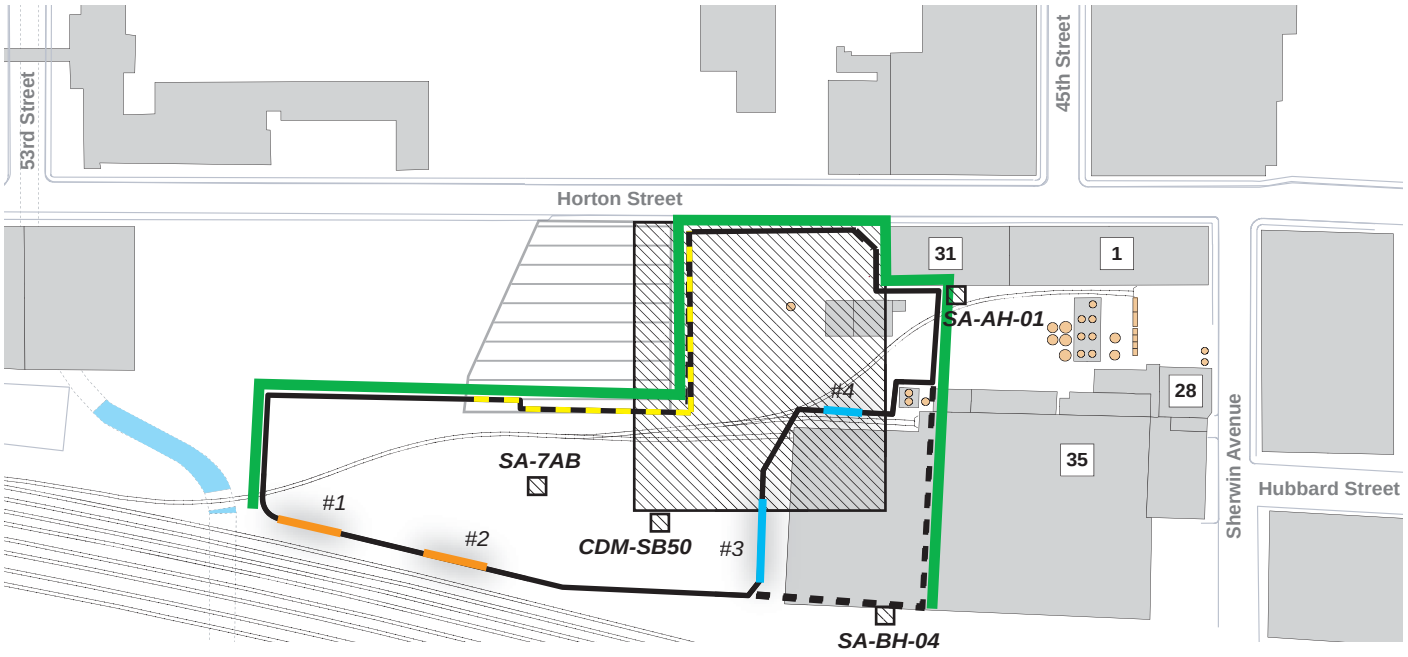
Current Slurry Wall

Breach without Treatment (#1 & #2)

Breach without Treatment (#3)

Slurry Wall Removal

Figure 4-4
Remedial Alternative 4A: Vadose Zone Excavation/Upgradient Interceptor Drain Installation/Passive In-Situ Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs



Current Slurry Wall

Slurry Wall Extension

Slurry Wall Removal

Saturated Soil Excavation on Rifkin

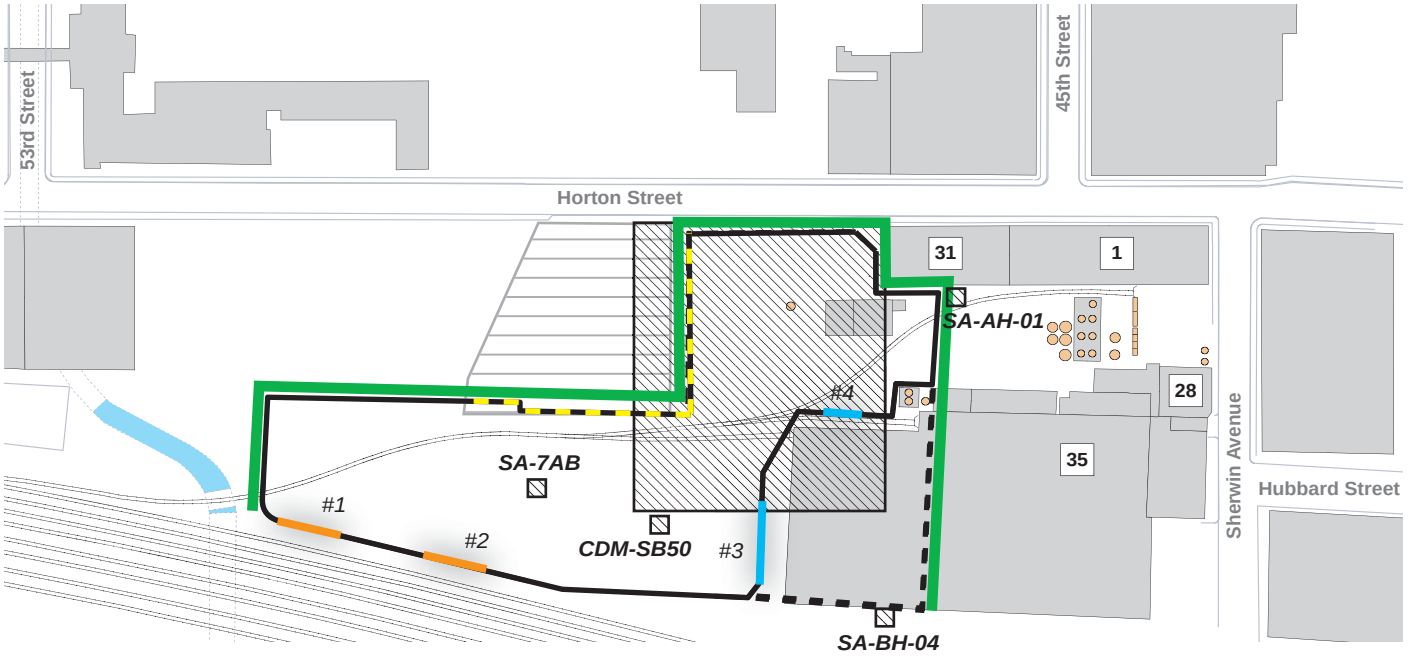
Interceptor Drain

Vadose Zone Soil Excavation

Breach with Passive Treatment (#1 & #2)

Breach without Treatment (#3 & #4)

Figure 4-5
Remedial Alternative 4B: Vadose Zone Excavation/Upgradient Interceptor Drain Installation/Active In-Situ Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs



Current Slurry Wall

Slurry Wall Extension

Slurry Wall Removal

Saturated Soil Excavation on Rifkin

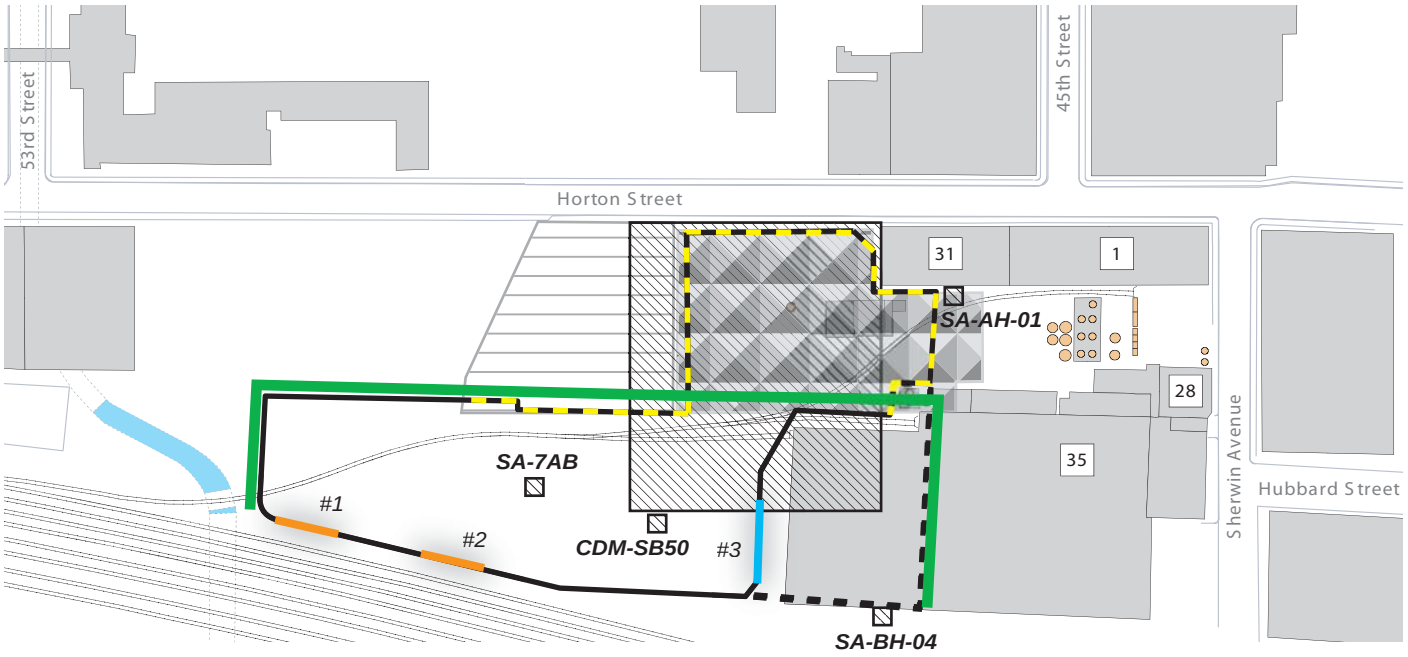
Interceptor Drain

Vadose Zone Soil Excavation

Breach with Active Treatment (#1 & #2)

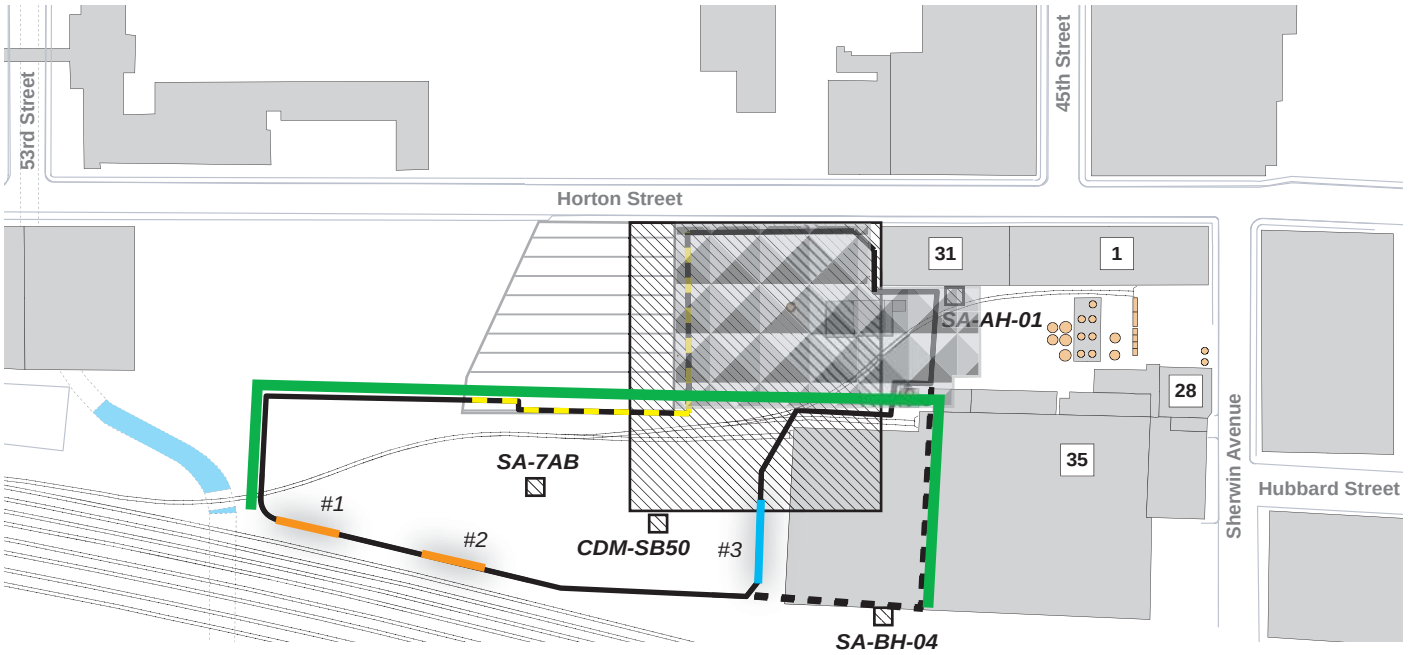
Breach without Treatment (#3 & #4)

Figure 4-6
Remedial Alternative 5A: Vadose Zone Excavation/Excavation Upgradient of Interceptor Drain/Downgradient Interceptor Drain Installation/Passive In-Situ Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs



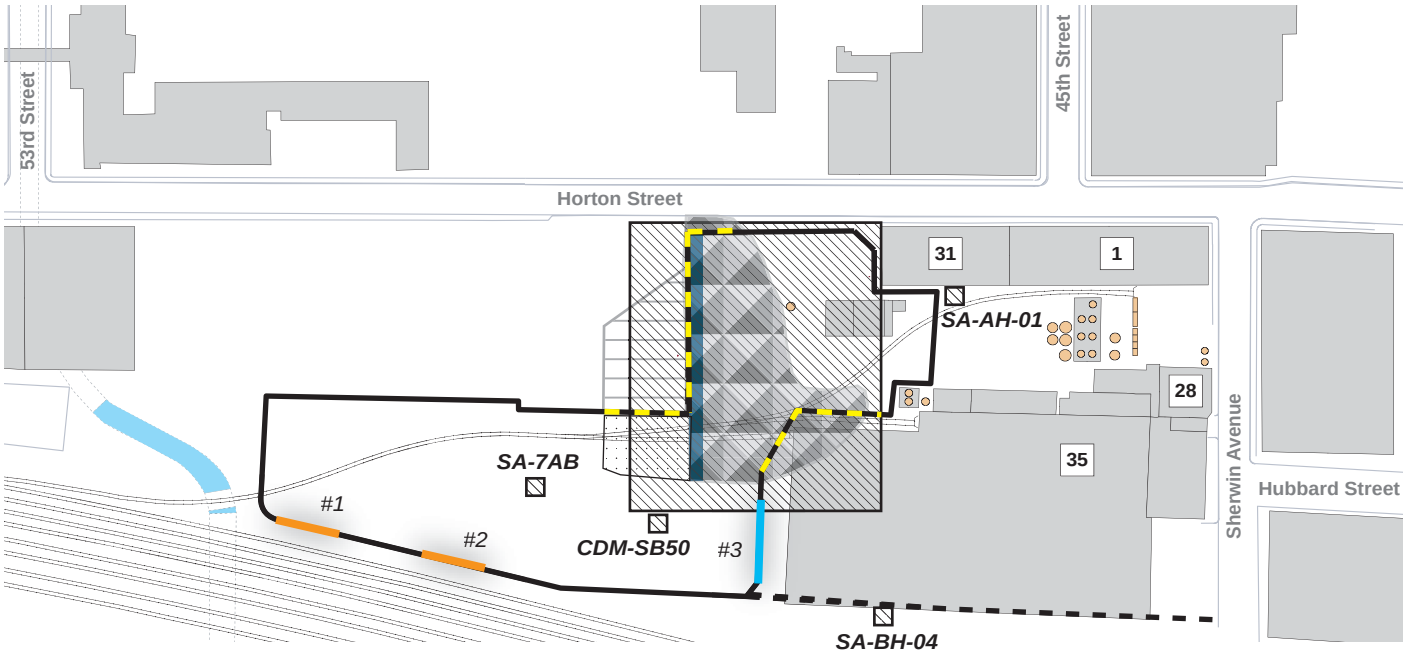
Current Slurry Wall
Slurry Wall Extension
Slurry Wall Removal
Saturated Soil Excavation on Rifkin
Interceptor Drain
Saturated Soil Excavation on S-W
Breach with Passive Treatment (#1 & #2)
Breach without Treatment (#3)
Vadose Zone Soil Excavation

Figure 4-7
Remedial Alternative 5B: Vadose Zone Excavation/Excavation Upgradient of Interceptor Drain/Downgradient Interceptor Drain Installation/Active In-Situ Groundwater Treatment/Rifkin Excavation/Groundwater Monitoring/LUCs



Current Slurry Wall
Slurry Wall Extension
Slurry Wall Removal
Saturated Soil Excavation on Rifkin
Interceptor Drain
Saturated Soil Excavation on S-W
Breach with Active Treatment (#1 & #2)
Breach without Treatment (#3)
Vadose Zone Soil Excavation

Figure 4-8
Remedial Alternative 6: Vadose Zone Excavation/Source Area Excavation/MNA/Groundwater Monitoring/LUCs



Saturated Soil Excavation on S-W and Low Permeability Backfill

Saturated Soil Excavation on S-W and High Permeability Backfill

Saturated Soil Excavation on Rifkin and Low Permeability Backfill

Interceptor Trench with Membrane Barrier Along Rifkin Property Boundary

Slurry Wall Extension

Vadose Zone Soil Excavation

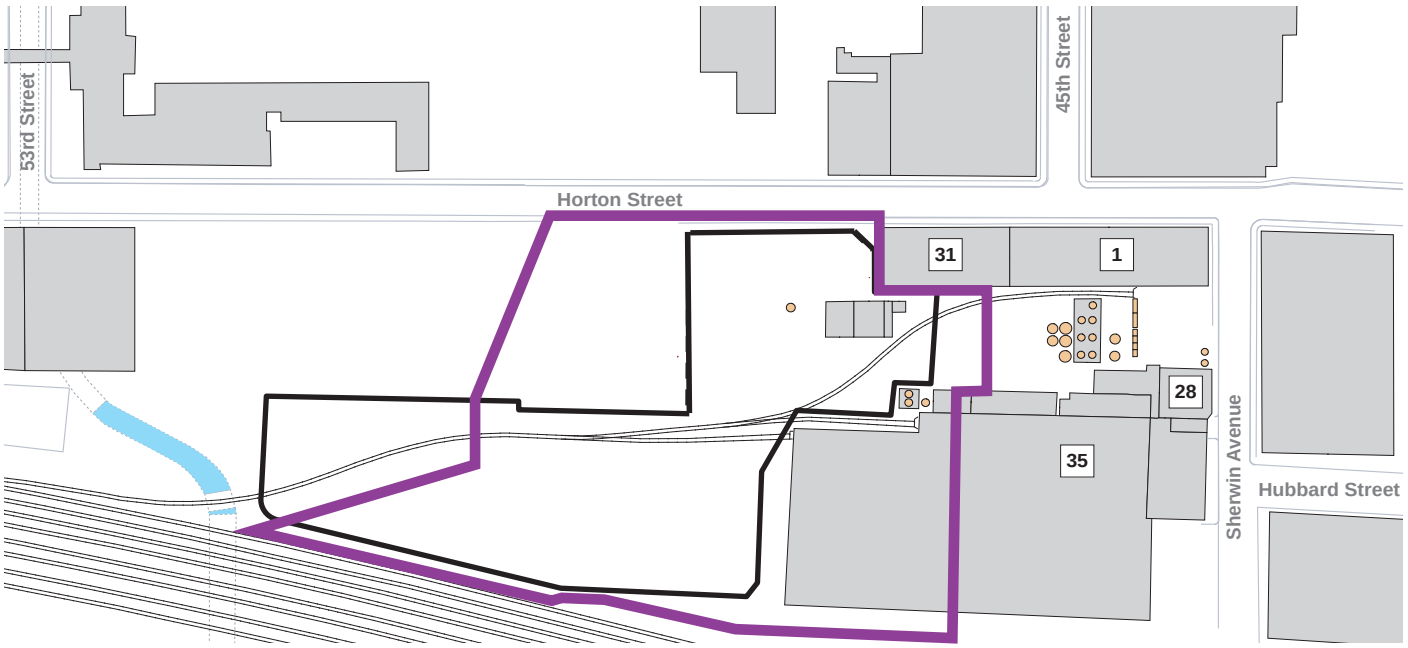
Current Slurry Wall

Breach without Treatment (#1 & #2)

Breach without Treatment (#3)

Slurry Wall Removal With Excavation

Figure 4-9
Remedial Alternative 7: A-Zone Aquifer Excavation/LUCs



A-Zone Aquifer Excavation (vadose and saturated)

Section 5
Planning and Pre-Remediation

This section presents descriptions of the anticipated remedy implementation schedule and details activities to be conducted during the remediation planning stage.

5.1 Preliminary Implementation Schedule

The general remedy implementation schedule described here presents remediation planning and implementation activities in its appropriate time sequence. Following approval by DTSC, the remedy will be implemented in accordance with the planning and design elements presented in this section. Remedy implementation is divided into five sets of activities:

- Planning,
- Pre-remediation,
- Remediation,
- Restoration, and
- Reporting.

Figure 5-1 presents a preliminary schedule for the remedy implementation. The schedule may change upon review and approval of the RAP. Further changes to the schedule may become apparent during preparation of the remedial design implementation plan (RDIP), submittal of remediation contractor plans, coordination with other Site activities, and/or procurement of local permits.

Work hours at the Site during remedy implementation activities will be 7:00 a.m. to 6:00 p.m. Work and transportation days are anticipated to be Monday through Friday, although weekend work may occur depending upon the schedule of activities. Weekend work hours will be 9:00 a.m. to 6:00 p.m., if necessary. These hours and work days may be modified based on conditions encountered during remediation.

5.2 Planning

Key activities to be conducted during the remediation planning stage include:

- Publication of the Public Notice and Fact Sheet;
- Preparation of Remedial Design Implementation Plan (RDIP); and,
- Selection of the remediation contractors.

These planning activities are identified on the preliminary project schedule presented in Figure 5-1.

5.3 Pre-Remediation

Key activities to be conducted during the Pre-Remediation stage include:

- Procurement of appropriate construction-related permits, including but not limited to: the Bay Area Air Quality Management District's Permit to Construct and Permit to Operate and Rule 8 Notification; Water Board's Notice of Intent for Coverage under the General Construction Storm Water Permit; Alameda County's well abandonment and construction permits; and appropriate wastewater discharge permit(s);
- Shutdown of the onsite groundwater extraction and treatment system. The system cessation would occur four weeks prior to remediation contractor mobilization to allow for adequate time to remove piping and equipment;
- Proper abandonment of Site wells within the excavation limits and wells not included in the post-remedy implementation groundwater monitoring[1], a list of existing wells proposed for abandonment is presented in Table 5-1 and their locations shown on Figure 5-2;
- Submittal of required RDIP for DTSC review and approval. Components of the RDIP will include: Dust and Vapor Control Plan (DVCP), Perimeter Air-Monitoring Plan (PAMP), and Transportation Plan; Health and Safety Plan (HASP); Operations, Maintenance and Monitoring Plan (OM&M Plan); Storm Water Pollution Prevention Plan (SWPPP); and, an updated schedule for remedy implementation; and
- Coordination of remediation construction-related activities with Novartis operations, including communication protocols, use of the former Rifkin parking area, schedule constraints, and Site security.

5.3.1 Health and Safety Plans

A Site HASP for onsite workers and a Community Safety Plan will be developed and included in the RDIP.

The Site HASP will generally consist of: identification of physical and chemical hazards; minimum training requirements for Site workers; criteria for upgrading levels of personal protective equipment (PPE); emergency information (e.g., directions to the nearest hospital and emergency telephone numbers); and administrative requirements (e.g., documentation of training and safety tailgate meetings).

During most of the remediation construction, PPE for Site workers is anticipated to be Level D (i.e., hard hats, steel-toed boots, chemical resistant gloves, ear protection, and

[1] Certain wells outside the excavation limits are not suitable for a long-term groundwater monitoring program due to their construction as large-diameter wells that would require large volume purge prior to sampling, monitoring wells not screened properly across the aquifer, or located away from critical post-remedy implementation groundwater flow patterns.

eye protection). Level C PPE (i.e., respiratory protection) may be required in some areas until the results of personal air monitoring indicate that it is unnecessary. Dust and vapor control measures will be implemented to limit exposure to COCs. Personal air monitoring will be performed using individual air pumps and hand held ionizing detectors for selected Site workers.

The Community Safety Plan will provide information for the community regarding the measures to control exposures to chemicals in soil and groundwater that could be released during the implementation. In addition, the Community Safety Plan will present the protocols for implementing the PAMP and for providing the air monitoring results from the PAMP. The substance of the Community Safety Plan will be presented to the community during a meeting prior to remediation.

5.3.2 Storm Water Pollution Prevention Plan

A SWPPP will be developed to address issues that could arise during rainfall events. A Notice of Intent (NOI) will be filed with the State Water Resources Control Board for coverage under the State's General Permit for Construction Activities. State guidelines for storm water control will be followed, including, but not limited to, silt fences and hay bales to limit erosion and/or off-site movement of sediment. The detailed methods for sediment control will be provided in the SWPPP.

Table 5-1
Existing Wells Proposed for Abandonment
Sherwin-Williams Emeryville Remedial Action Plan

Well Number	Well Construction Details and Other Information														*Basis for Abandonment*
	Type	*Location Relative to Current Slurry Wall*	*Existing Well Status or Condition*	*Hydraulic Zone Monitored*	*Date Constructed*	*Top of Casing Elevation* (feet NAVD88)	*Total Depth* (feet bgs)	*Casing Material*	*Casing Diameter* (inches)	*Screen Slot Size* (inches)	*Screen Interval Depths* Top (feet bgs)	*Screen Interval Depths* Bottom (feet bgs)	*Screen Interval Elevations* Top (feet NAVD88)	*Screen Interval Elevations* Bottom (feet NAVD88)	
EX-1	Extraction	Inside on SW	Active extraction	A	7/17/1995	12.78	20.0	SS	6	0.010	5.0	20.0	7.8	-7.2	Large diameter well
EX-10	Extraction	Inside on SW	Active extraction	A	8/27/1998	14.49	23.0	SS	6	0.010	8.0	23.0	6.5	-8.5	Within excavation limits
EX-2	Extraction	Inside on SW	Active extraction	A	7/17/1995	12.78	19.0	SS	6	0.010	4.0	19.0	8.8	-6.2	Within excavation limits
EX-3	Extraction	Inside on SW	Active extraction	A	7/17/1995	17.60	20.0	SS	6	0.010	5.0	20.0	12.6	-2.4	Within excavation limits
EX-4	Extraction	Inside on SW	Active extraction	A	8/31/1998	13.11	26.0	SS	6	0.010	7.0	25.0	6.1	-11.9	Large diameter well
EX-5	Extraction	Inside on SW	Active extraction	A	8/31/1998	13.04	23.5	SS	6	0.010	6.0	21.5	7.0	-8.5	Large diameter well
EX-6	Extraction	Inside on SW	Active extraction	A	8/28/1998	12.46	21.5	SS	6	0.010	6.0	20.5	6.5	-8.0	Large diameter well
EX-7	Extraction	Inside on SW	Active extraction	A	8/28/1998	14.02	23.5	SS	6	0.010	6.0	21.0	8.0	-7.0	Within excavation limits
EX-8	Extraction	Inside on SW	Active extraction	A	9/1/1998	18.98	29.5	SS	6	0.010	9.0	29.0	10.0	-10.0	Within excavation limits
EX-9	Extraction	Inside on SW	Active extraction	A	9/2/1998	20.15	26.0	SS	6	0.010	11.0	25.5	9.2	-5.4	Within excavation limits
EX-16	Extraction	Outside on Rifkin	Active extraction	A	12/29/1999	17.88	17.5	SS	6	0.010	7.5	17.0	10.4	0.9	Within excavation limits
LF-10	Monitoring	Inside on SW	Active monitoring	A	10/27/1989	13.69	18.0	PVC	4	0.020	5.0	15.0	8.7	-1.3	Within slurry wall breach
LF-17	Monitoring	Inside on SW	Active monitoring	A	2/1/1996	15.26	14.5	PVC	2	0.010	8.0	14.0	7.3	1.3	Within excavation limits
LF-22	Monitoring	Inside on SW	Active monitoring	A	1/30/1996	21.86	23.0	PVC	2	0.010	12.0	22.0	9.9	-0.1	Within excavation limits
LF-26	Monitoring	Inside on SW	Active monitoring	A	1/30/1996	15.60	18.5	PVC	2	0.010	8.5	18.0	7.1	-2.4	Within slurry wall breach
LF-4	Monitoring	Inside on SW	Active monitoring	A	5/17/1989	15.31	14.5	PVC	2	0.010	6.0	11.0	9.3	4.3	Improperly screened
LF-6	Monitoring	Inside on SW	Active monitoring	A	5/16/1989	13.37	24.0	PVC	2	0.010	6.0	11.0	7.4	2.4	Improperly screened
LF-7	Monitoring	Inside on SW	Active monitoring	A	5/17/1989	17.14	20.0	PVC	2	0.010	7.0	17.0	10.1	0.1	Historically non detect for COCs
LF-8	Monitoring	Inside on SW	Active monitoring	A	11/2/1989	15.61	15.0	PVC	4	0.020	5.0	15.0	10.6	0.6	Large diameter well
MW-4	Monitoring	Outside on Rifkin	Active monitoring	A	12/9/1994	18.26	18.5	PVC	2	0.010	7.0	17.0	11.3	1.3	Within excavation limits
MW-5	Monitoring	Outside on Rifkin	Active monitoring	A	12/9/1994	17.94	17.0	PVC	2	0.010	7.0	17.0	10.9	0.9	Within excavation limits
CDM-1	Monitoring	Outside on SW	Active monitoring	A	11/27/2006	13.60	12.0	PVC	1	0.020	7.0	12.0	6.6	1.6	Within slurry wall extension
LF-11	Monitoring	Outside on SW	Active monitoring	A	10/30/1989	12.75	15.5	PVC	4	0.020	5.0	15.0	7.8	-2.3	Within slurry wall extension
LF-20	Monitoring	Outside on SW	Active monitoring	A	2/5/1996	14.47	18.3	PVC	2	0.010	8.0	18.0	6.5	-3.5	Within slurry wall breach
LF-3	Monitoring	Outside on SW	Active monitoring	A	5/18/1989	14.70	11.5	PVC	2	0.010	6.0	11.0	8.7	3.7	Within excavation limits
SA-AW-01	Monitoring	Outside on SW	Active monitoring	A	6/24/2001	12.33	15.0	PVC	2	0.010	5.0	15.0	7.3	-2.7	Within slurry wall extension
SA-AW-05	Monitoring	Outside on SW	Active monitoring	A	6/22/1999	15.42	15.0	PVC	2	0.010	5.0	15.0	10.4	0.4	Historically non detect for COCs
SP-AW-06	Monitoring	Outside on SW	Active monitoring	A	?	21.42	?	?	?	?	?	?	?	?	Historically non detect for COCs
LF-PZ1	Piezometer	Inside on SW	Active monitoring	A	11/4/1997	17.62	25.0	PVC	3/4	?	5.0	20.0	12.6	-2.4	Within excavation limits
LF-PZ10	Piezometer	Inside on SW	Active monitoring	A	10/30/1997	14.96	19.5	PVC	3/4	?	4.5	19.5	10.5	-4.5	Within excavation limits
LF-PZ13	Piezometer	Inside on SW	Active monitoring	A	10/31/1997	13.63	19.5	PVC	3/4	?	4.5	19.5	9.1	-5.9	Within excavation limits
LF-PZ14	Piezometer	Inside on SW	Active monitoring	A	10/31/1997	12.91	19.0	PVC	3/4	?	4.0	19.0	8.9	-6.1	Piezometer not needed
LF-PZ15	Piezometer	Inside on SW	Active monitoring	A	10/31/1997	17.03	16.0	PVC	3/4	?	6.0	16.0	11.0	1.0	Piezometer not needed
LF-PZ16	Piezometer	Inside on SW	Active monitoring	A	11/3/1997	13.73	17.0	PVC	3/4	?	3.0	13.0	10.7	0.7	Within excavation limits
LF-PZ17	Piezometer	Inside on SW	Active monitoring	A	11/3/1997	12.82	17.0	PVC	3/4	?	3.0	13.0	9.8	-0.2	Piezometer not needed
LF-PZ18	Piezometer	Inside on SW	Active monitoring	A	11/3/1997	15.71	19.0	PVC	3/4	?	3.0	13.0	12.7	2.7	Piezometer not needed
LF-PZ19	Piezometer	Inside on SW	Active monitoring	A	11/3/1997	16.37	19.0	PVC	3/4	?	5.0	15.0	11.4	1.4	Piezometer not needed
LF-PZ20	Piezometer	Inside on SW	Active monitoring	A	11/4/1997	16.15	22.0	PVC	3/4	?	5.0	20.0	11.2	-3.9	Within excavation limits
LF-PZ26	Piezometer	Inside on SW	Active monitoring	A	11/14/2000	21.40	22.0	PVC	3/4	0.010	7.0	22.0	14.4	-0.6	Within excavation limits
LF-PZ29	Piezometer	Inside on SW	Active monitoring	A	1/6/2000	14.45	16.0	PVC	2	0.020	7.0	16.0	7.5	-1.6	Within excavation limits
LF-PZ3	Piezometer	Inside on SW	Active monitoring	A	12/28/1997	20.70	23.0	PVC	3/4	?	8.0	23.0	12.7	-2.3	Within excavation limits
LF-PZ34	Piezometer	Inside on SW	Active monitoring	A	1/4/2000	21.45	17.0	PVC	2	0.020	7.0	17.0	14.5	4.5	Within excavation limits
LF-PZ6	Piezometer	Inside on SW	Active monitoring	A	10/28/1997	21.14	23.0	PVC	3/4	?	8.0	23.0	13.1	-1.9	Within excavation limits
LF-PZ8	Piezometer	Inside on SW	Active monitoring	A	10/39/97	19.73	23.0	PVC	3/4	?	8.0	23.0	11.7	-3.3	Within excavation limits
LF-PZ9	Piezometer	Inside on SW	Active monitoring	A	10/30/1997	15.46	19.5	PVC	3/4	?	4.5	19.5	11.0	-4.0	Piezometer not needed
LF-PZ2	Piezometer	Outside on Rifkin	Active monitoring	A	10/30/1996	20.74	23.0	PVC	3/4	?	8.0	23.0	12.7	-2.3	Within excavation limits
LF-PZ27	Piezometer	Outside on Rifkin	Active monitoring	A	12/28/1999	19.08	16.0	PVC	2	0.020	7.0	16.0	12.1	3.1	Within excavation limits
LF-PZ28	Piezometer	Outside on Rifkin	Active monitoring	A	1/6/2000	14.83	16.0	PVC	2	0.020	7.0	16.0	7.8	-1.2	Within excavation limits
LF-PZ30	Piezometer	Outside on Rifkin	Active monitoring	A	12/28/1999	18.41	15.0	PVC	2	0.020	7.0	15.0	11.4	3.4	Within excavation limits
LF-PZ31	Piezometer	Outside on Rifkin	Active monitoring	A	12/28/1999	18.25	26.5	PVC	2	0.020	17.5	26.5	0.8	-8.3	Within excavation limits
LF-PZ32	Piezometer	Outside on Rifkin	Active monitoring	A	1/3/2000	19.19	16.0	PVC	2	0.020	7.0	16.0	12.2	3.2	Piezometer not needed
LF-PZ33	Piezometer	Outside on Rifkin	Active monitoring	A	1/4/1999	21.59	17.0	PVC	2	0.020	7.0	17.0	14.6	4.6	Within excavation limits
LF-PZ11	Piezometer	Outside on SW	Active monitoring	A	10/30/1997	15.49	19.5	PVC	3/4	?	4.5	19.5	11.0	-4.0	Piezometer not needed
LF-PZ12	Piezometer	Outside on SW	Active monitoring	A	10/31/1997	13.71	19.0	PVC	3/4	?	4.0	19.0	9.7	-5.3	Within excavation limits
LF-PZ7	Piezometer	Outside on SW	Active monitoring	A	10/29/1997	21.74	23.0	PVC	3/4	?	8.0	23.0	13.7	-1.3	Within excavation limits

Table 5-1
Existing Wells Proposed for Abandonment
Sherwin-Williams Emeryville Remedial Action Plan

Well Number	Well Construction Details and Other Information														*Basis for Abandonment*
	Type	*Location Relative to Current Slurry Wall*	*Existing Well Status or Condition*	*Hydraulic Zone Monitored*	*Date Constructed*	*Top of Casing Elevation* (feet NAVD88)	*Total Depth* (feet bgs)	*Casing Material*	*Casing Diameter* (inches)	*Screen Slot Size* (inches)	*Screen Interval Depths* Top (feet bgs)	*Screen Interval Depths* Bottom (feet bgs)	*Screen Interval Elevations* Top (feet NAVD88)	*Screen Interval Elevations* Bottom (feet NAVD88)	
LF-B3	Monitoring	Inside on SW	Active monitoring	B	11/3/1989	13.00	39.5	PVC	2	0.010	34.0	39.0	-21.0	-26.0	Within slurry wall breach
LF-B5	Monitoring	Inside on SW	Active monitoring	B	2/2/1996	20.99	44.0	PVC	2	0.010	34.0	44.0	-13.0	-23.0	Within excavation limits
LF-B6	Monitoring	Inside on SW	Active monitoring	B	2/2/1996	14.69	39.0	PVC	2	0.010	28.0	38.5	-13.3	-23.8	B-zone well not needed
LF-B4	Monitoring	Outside on Horton	Active monitoring	B	6/29/1990	17.25	48.0	PVC	2	0.020	36.0	46.0	-18.8	-28.8	B-zone well not needed
RP-BW-02	Monitoring	Outside on Rifkin	Active monitoring	B	7/9/1999	18.67	44.0	PVC	2	0.010	34.0	44.0	-15.3	-25.3	Within excavation limits
SA-BW-01	Monitoring	Outside on SW	Active monitoring	B	6/9/1999	12.77	45.0	PVC	2	0.010	35.0	45.0	-22.2	-32.2	Within slurry wall extension

Notes:
NADV88: North American Vertical Datum of 1988
bgs: below ground surface
toc: top of casing
PVC: polyvinyl chloride
SS: stainless steel

ID	Task Name	Duration	Start	Finish
1	**Remediation Planning**	**105 days**	**Tue 9/7/10**	**Tue 2/1/11**
2	Submittal of Remedial Design Implementation Plan	0 days	Tue 9/7/10	Tue 9/7/10
3	Contractor Selection	3 mons	Fri 10/8/10	Thu 12/30/10
4	Distribute Fact Sheet	0 days	Tue 2/1/11	Tue 2/1/11
5	**Pre-Remediation**	**20 days**	**Tue 2/1/11**	**Mon 2/28/11**
6	Permits, Plans & Submittals	1 mon	Tue 2/1/11	Mon 2/28/11
7	**Remediation**	**161 days**	**Tue 3/1/11**	**Tue 10/11/11**
8	Contractor Mobilization	5 days	Tue 3/1/11	Mon 3/7/11
9	GW Monitoring Well Abandonment	20 days	Tue 3/8/11	Mon 4/4/11
10	Soil Vapor Extraction Implementation and Operation	20 days	Tue 3/8/11	Mon 4/4/11
11	Establish Public Protection and Security	10 days	Tue 3/8/11	Mon 3/21/11
12	Set up Air Monitoring and Determine Background Levels	10 days	Tue 3/8/11	Mon 3/21/11
13	Implement SWPP and Waste Stockpile Berms	5 days	Tue 3/22/11	Mon 3/28/11
14	Install Dewatering System	15 days	Tue 3/22/11	Mon 4/11/11
15	Operate Dewatering System	121 days	Tue 4/12/11	Tue 9/27/11
16	Remove Raised Cap	11 days	Tue 4/12/11	Tue 4/26/11
17	Install Shoring	20 days	Thu 4/21/11	Wed 5/18/11
18	Excavate Vadose & Saturated Soil	90 days	Wed 4/27/11	Tue 8/30/11
19	Backfill	90 days	Wed 5/11/11	Tue 9/13/11
20	Install Slurry Wall Breaches	20 days	Wed 8/31/11	Tue 9/27/11
21	Extend Slurry Wall	20 days	Wed 8/31/11	Tue 9/27/11
22	Site Restoration and Demobilization	10 days	Wed 9/28/11	Tue 10/11/11
23	**Post-Remediation**	**40 days**	**Wed 9/28/11**	**Tue 11/22/11**
24	Install New GW Monitoring Wells	30 days	Wed 9/28/11	Tue 11/8/11
25	Remedy Completion Report	40 days	Wed 9/28/11	Tue 11/22/11

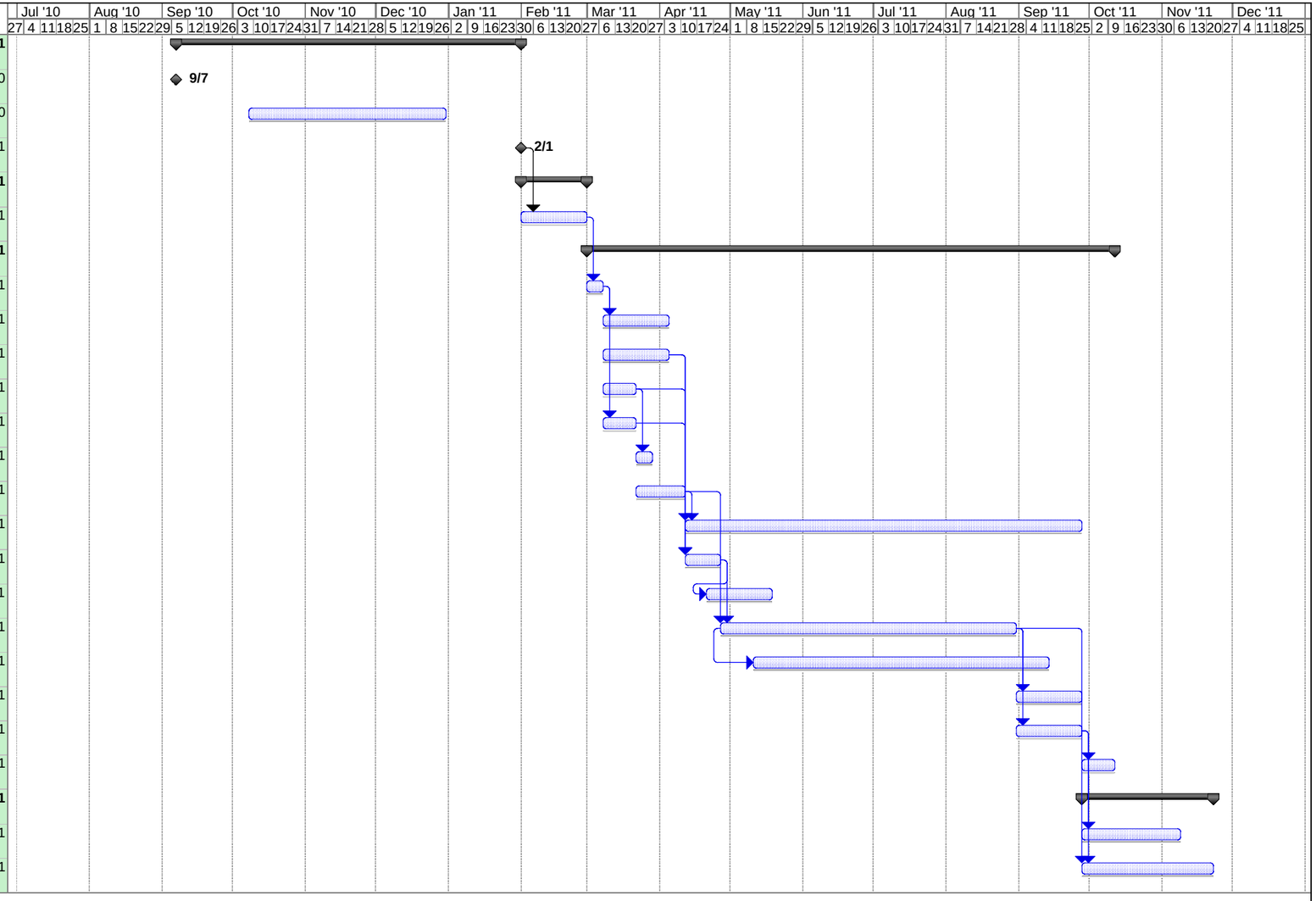


Figure 5-1
Preliminary Project Schedule
Sherwin-Williams Company - Emeryville, California

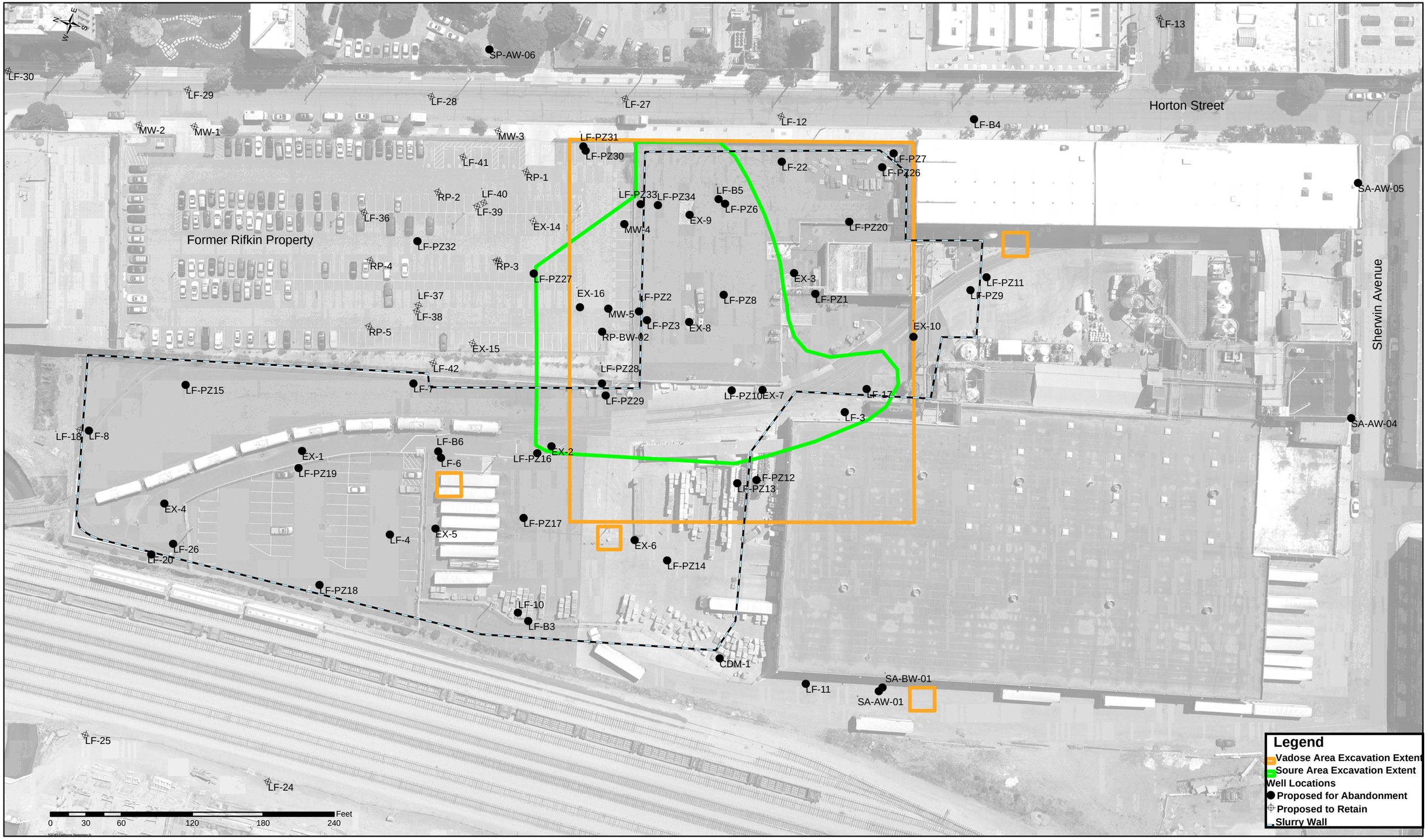


Figure 5-2
Existing Wells Proposed for Abandonment
Sherwin-Williams Company - Emeryville, California

Section 6
Remediation and Restoration

This section provides an expanded description for the implementation of the selected remedy (FS alternative 6, see Section 4). While this section describes specific design and technical components for remedy implementation, the final design, as presented in the RDIP, may be different, but will achieve the identified objectives.

During remedy implementation, potential exposure to COCs could occur from inhalation of dust and organic vapors generated during soil handling. The DTSC-approved Public Health Evaluation of the Remedial Alternative (PHERA) (CDM, 2009a) document determined that use of appropriate emission control technologies (e.g., dust, vapor, and odor controls) can effectively control potential exposure of the community to unacceptable concentrations of COCs during remedy implementation. This section provides additional details on the emission control and monitoring procedures.

Major activities to be conducted during remedy implementation are:

- Establishment of Site exclusion zones, security areas and signage;
- Mobilization of contractor equipment to the Site;
- Establishment of the Site construction office;
- Installation of monitoring systems;
- Installation of roadway within the Site and within roadway easement along western Site boundary;
- Abandonment of selected groundwater monitoring wells;
- Extraction and treatment of soil vapors within and underlying the Raised Cap;
- Removal, handling, and off-site disposal of the Raised Cap;
- Installation of shoring system for excavation along Horton Street;
- Dewatering of groundwater from the excavation and on-site water treatment;
- Excavation, handling, and off-site disposal of material;
- Installation of slurry wall breaches;
- Extension of existing slurry wall;
- Backfilling and compaction of imported fill in the excavation;
- Installation of groundwater monitoring wells; and
- Demobilization of remediation equipment.

6.1 Construction Area Layout and Controls

Remedy implementation activities will utilize many of the remaining building slabs for equipment and supplies storage, waste stockpiling and handling prior to off-site transport and disposal. Building foundations that do not interfere with the excavation will be left in place pending further redevelopment of the Site.

Figure 6-1, Preliminary Site Layout and Controls, presents a preliminary layout of work areas and general Site controls for the remedy implementation activities. This figure is intended as a general guideline. The final layout is subject to refinements during preparation of the RDIP and will be established by the remediation contractor.

6.1.1 Engineered Controls During Remediation

Remedy implementation activities will include engineered controls to reduce short-term exposure risks from releases of COCs to the environment and/or community in the form of dust, vapors, and/or surface water runoff. Remedy implementation activities are presented in Table 6-1, under individual rows. Categories of potential emissions are listed as column headings in the table. Engineered controls for these emission types comprise the columns in Table 6-1.

6.1.1.1 Dust Control

A Dust and Vapor Control Plan (DVCP) will be prepared in accordance with the remediation specifications and compliance requirements as applicable. The DVCP will identify techniques, supplies, and equipment needed to control dust emissions during remedy implementation. The DVCP will include but are not limited to the following elements for dust control: water sprays/mist, surfactants, wetting agents, dust suppressants, covers, and windscreens. The DVCP will be reviewed by the DTSC prior to remedy implementation as part of the RDIP. The DVCP will be consistent with the findings presented in the PHERA regarding appropriate use of dust controls.

If observations or measurements, or complaints from people in the community indicate a need for more stringent dust control, the contractor will increase the magnitude and frequency of the dust control. If further dust control measures are needed due to winds, the contractor may be required to stop certain portions of the work until conditions improve or the contractor employs satisfactory compliance methods.

6.1.1.2 Vapor and Odor Control

The highest VOC concentrations are anticipated to be encountered during excavation in the northwest portion of the planned excavation area. The DVCP will identify techniques, supplies, and equipment needed to control vapor emissions during remedy implementation. The DVCP will include, but not be limited to, the following elements for vapor and odor control: water spray/mist; vapor suppressant foam; and covers. The DVCP will be reviewed by the DTSC prior to remedy implementation as part of the RDIP.

Prior to removal of the Raised Cap, a network of vapor extraction wells will be installed on the Raised Cap and surrounding vadose zone soil excavation area. These vapor extraction wells will be utilized to remove stagnant VOCs present in the Raised Cap material and vadose zone soils prior to excavation. The vapor stream will be treated through a combination of adsorption media. The soil vapor extraction and treatment system will be operated pursuant to a BAAQMD permit.

The vapor extraction system is expected to operate for up to four weeks prior to excavation activities. The total VOC concentrations are expected to decrease and stabilize (as monitored at the influent of the vapor treatment system) to equilibrium with mass transfer processes that are generating the vapors from VOCs absorbed to soil and dissolved in water. The extracted soil vapor will be field monitored for total VOC concentrations. Removal of the Raised Cap and soil excavation will be initiated when total VOC concentrations reach relatively stabilized levels. Portions of the soil vapor extraction system will continue to operate during the removal of the Raised Cap and soil excavation activities. Vapor extraction wells will be removed as the Raised Cap removal and soil excavation proceeds. In addition, during Raised Cap removal and soil excavation, potential volatilization of VOCs will be managed through engineering controls.

Perimeter air monitoring will be used to confirm the effectiveness of vapor control methods. If vapor emission concentrations at the perimeter are detected above pre-set action levels (as presented in Section 6.2.1), vapor control methods will be modified until vapor concentrations are reduced below the action levels.

During Raised Cap removal and soil excavation, odors associated with Site COCs will be managed through engineering controls. During remedy implementation, odors unrelated to impacted soil/debris (i.e., odors not associated with COCs) could also be generated. These types of odors will also be controlled during remedy implementation, using the same engineering controls as those for odors associated with COCs.

6.1.1.3 Surface Water Runoff Control

An array of isolated sumps, pumps, and hoses are used currently at the S-W Site for storm water management. This current storm water management system would continue under a construction SWPPP during remedy implementation, as discussed in Section 5.

This current storm water management system replaced the former underground piping network. This former network has been plugged through installation of temporary plugs at several locations in the main storm sewer connecting to Temescal Creek channel. These plugs are routinely monitored for effectiveness. Storm water is collected in the sumps and pumped directly to the Temescal Creek channel.

The construction SWPPP will be developed to address issues that could arise during rainfall events during remedy implementation. As part of the SWPPP, sections of the

main storm sewer connecting to Temescal Creek channel will be removed and filled with grout to create permanent plugs. The remaining parts of the existing system will continue to operate as needed during remedy implementation.

Water that has been in contact with impacted materials, and water extracted from the excavation, will be isolated from non-impacted storm water by construction and maintenance of berms. This contact water will be treated on-site and discharged to Temescal Creek, discharged to the sanitary sewer (if permitted), or transported off-site for treatment and discharge.

6.2 Monitoring of Engineering Controls

The engineered controls for limiting potential short-term exposures from releases of COCs to the environment and/or community in the form of dust, vapors, and/or surface water runoff, will be monitored to confirm their effectiveness. In addition to health-based exposure risks, monitoring is needed to confirm control of noise, odor, and vibration.

The DTSC-approved Public Health Evaluation of the Remedial Alternative (PHERA) (CDM, 2009a) document determined performance standards to be used during air monitoring for evaluating the effectiveness of dust and vapor controls. The performance standards are concentrations of respirable COCs in air that should not be exceeded, as defined in Table 6-2 and 6-3. Adherence to performance standards helps to provide protection of people in the community from unacceptable exposure to COCs. The performance standards established in the PHERA for the COCs are summarized in Tables 6-2 and 6-3.

Action levels for respirable dust and total VOCs were developed by which COCs can be evaluated immediately as remedy implementation activities proceed. Particulate matter with an effective diameter of less than or equal to 10 microns (µm) (PM10) is considered respirable (National Ambient Air Quality Standards). The action levels established in the PHERA for total VOCs and PM10 are summarized in Tables 6-2 and 6-3, respectively.

6.2.1 Perimeter Air Monitoring and Sampling

As discussed in Section 5, a Site safety plan will be developed to address personal protective equipment (PPE) for Site workers and visitors and personal air monitoring for Site workers to evaluate the potential for exposure. This section focuses on perimeter air monitoring and sampling to evaluate potential exposure to the community.

During material handling activities (i.e., excavation, loading, stockpiling, etc.), perimeter air monitoring will be conducted to confirm the effectiveness of dust and vapor controls. As presented on Figure 6-1, air monitoring stations are anticipated to be placed along all perimeters of the Site. Final number and location of the stations is subject to refinements during preparation of the RDIP.

S-W has operated a meteorological station at the Site since August 2002. The station records wind speed, direction, temperature, and rainfall at 30-minute intervals. The station, was originally located in the approximate center of the S-W property at the end of the then existing rail car loading dock extending north from the northeast corner of former Building 35 and was positioned approximately 20 feet above ground. The station was relocated to a nearby utility pole in July 2007, prior to Site demolition activities. The station data collected between August 2002 and July 2007 confirmed a predominantly on-shore wind direction from the west northwest, with average wind speeds of 3 mph and recorded gusts as high as 9 mph from this direction. Existing Site wind data indicate maximum recorded winds from the south southeast at 18 mph. The existing meteorological station, or a replacement unit, will remain operational to monitor changes in wind direction during remedy implementation.

As part of the RDIP, a Perimeter Air-Monitoring Plan (PAMP) will be prepared for review and approval by DTSC and implemented. The PAMP will include the following tasks (subject to DTSC approval):

- **Real-time dust monitoring –** This task will involve using fixed-location direct-reading monitor at the perimeter air monitoring stations to measure PM10 concentrations at the Site boundaries. The dust monitors will consist of ThermoMIE brand DataRam units or equivalent that reliably respond to PM10 concentrations as low as 0.1 microgram per cubic meter (µg/m3). The dust monitors will be used to automatically record PM10 concentrations, and provide an alert if the PM10 action level is exceeded. The proposed locations for these monitors during remedy implementation are shown on Figure 6-1, subject to refinements during preparation of the RDIP. Additionally, during construction operations, portable dust monitors will be utilized near on-site activities so that real-time feedback can be provided to adjust construction operations and/or dust controls to limit potential exceedance of the PM10 action level at the perimeter air monitoring stations.

- **Real-time VOC Monitoring –** Volatile organic compounds (VOCs) concentrations will be measured utilizing portable field gas chromatographs (GCs) such as a Photovac Voyager GC or equivalent. The GCs measure volatile organic compounds by passing the air sample through an analytical detector and electronically measuring the resulting response. The GCs will be configured to operate in total and compound-specific modes so that total and individual VOC concentrations can be quantified and compared to the VOC action levels. The GC instrument will be selected to reliably respond to total VOC concentrations as low as 1 part per billion by volume (ppbv). Additionally, during construction operations, portable total VOC monitors will be utilized near on-site activities so that real-time feedback can be provided to adjust operations and/or vapor controls to limit potential exceedance of the VOC action levels at the perimeter air monitoring stations.

- **Time-integrated ambient air sampling and analysis for VOCs –** During the initial weeks of remedy implementation, 24-hour time-integrated perimeter air samples will be collected daily for VOC analysis. Collection will be performed using high-volume size selective inlet (SSI) samplers located in the predominantly downwind position. This high-volume air sampling will be performed each work day during removal of the Raised Cap material. Data collected from these sampling events will be compared to VOC performance standards and correlated with real-time total VOC concentrations. Once a reliable correlation is established, a modified, reduced sampling frequency will be proposed to DTSC and implemented after DTSC approval. Daily sampling will be maintained on periods of work during which the highest VOC-impacted soil excavation activities will occur.

- **Time-integrated ambient air sampling and analysis for Arsenic –** During the initial weeks of remedy implementation, two consecutive 4-hour time-integrated perimeter air samples during dust generating work hours (8:00 a.m. to 4:00 p.m.) and one 16-hour time-integrated perimeter air samples during non dust generating hours will be collected daily will be collected daily for respirable arsenic analysis. As needed on any given day, a third four-hour sample will be collected if dust generating work persists outside these hours, and the non-work hour sample will become a 12-hour time-integrated sample. Collection and analysis of these samples on a daily basis will allow for confirmation that both the acute (4-hour) performance standard and subchronic performance standard for arsenic are being met. Collection will be performed using high-volume size selective inlet (SSI) samplers located in a predominantly downwind position. This high-volume air sampling will be performed each work day during removal of the Raised Cap material. Data collected from these sampling events will be compared to performance standards for arsenic to correlate real-time PM10 readings with respirable arsenic concentration. Daily sampling will continue at the start of the soil excavation activities. Once a reliable correlation is established, a modified, reduced sampling frequency will be proposed to DTSC and implemented after DTSC approval. Daily sampling will be maintained on periods of work during which the highest arsenic-impacted soil excavation activities will occur.

- **Time-integrated ambient air sampling and analysis for Lead–** During the initial weeks of remedy implementation, 24-hour time-integrated perimeter air samples will be collected daily for respirable lead analysis. Collection and analysis of this sample on a daily basis will allow for confirmation that the performance standard for lead is being met. Collection will be performed using high-volume size selective inlet (SSI) samplers located in a predominantly downwind position. This high-volume air sampling will be performed each work day during removal of the Raised Cap material. Data collected from these sampling events will be compared to performance standards for lead to correlate real-time PM10 readings with respirable lead concentration. Once a reliable correlation is established, a modified, reduced sampling frequency will be proposed to DTSC and implemented after DTSC approval. Daily sampling will be maintained on periods

of work during which the highest lead-impacted soil excavation activities will occur.

Comparison of detected COC concentrations in air with its respective performance standards will be used to confirm the validity of the developed action levels. Action levels will also be compared to real-time dust and vapor levels. Comparison of measured dust and vapor levels with the action levels and VOC odor thresholds will be used to adjust the dust, vapor, and odor control measures, if needed.

6.2.1.1 Action Level Exceedance and Adjustment

If the air monitoring action levels are exceeded, Site air emission controls will be evaluated and adjusted, as necessary. If during a consecutive 4-hour period in a single work day the average PM10 measurements exceeds the acute PM10 action level or if the rolling-average PM10 and/or total VOC measurement exceeds the respective subchronic action level, operations will be reviewed, the cause for the exceedance determined, and appropriate actions taken. As necessary, remedy implementation activities will be suspended until the cause is identified and additional control measures are implemented.

The action levels are based on calculations that utilize existing Site Raised Cap material, soil, and groundwater data. As the air samples to be collected during remedy implementation are analyzed to determine actual COC concentrations in air during remedy implementation, the action level calculations may be revised based on the correlation between soil/groundwater COC concentrations to those in air, i.e., update the VOC action levels.

6.2.2 Noise Monitoring

Emeryville Noise Ordinance No. 03-002, dated August 19, 2003, specifies the requirements for minimizing noise-related impacts during remedy implementation. Specifically, general construction noise (Section 5-13.05 of the Noise Ordinance) shall be limited to weekdays from 7:00 am to 6:00 pm. Although not anticipated for this remedy implementation, pile driving and similarly loud activities are limited to weekdays from 8:00 am to 5:00 pm. More restrictive hours for allowable construction noise may be established as appropriate, given the surrounding neighborhood and type of noise.

Weekend work, and/or work outside the established weekday time limits, may be allowed at the discretion of the City Manager, the Planning and Building Director, or the Public Works Director. Weekend construction work, if allowed, would be limited to 9:00 am to 6:00 pm.

Remedy implementation activities are anticipated to be conducted during the allowable weekday construction noise time limits. Activities related to Site security, such as stockpile maintenance, may be conducted during night-time hours, if needed. If activities are proposed outside of the weekday allowable construction noise time limits, the remediation contractor will apply to the City for a waiver, as described in

Section 5-13.06 of the Ordinance. The procedures for waiver application require submittal of a description of the type of work to be performed, the type of equipment to be used, notifications to neighbors, and, among other requirements, a description of the types of construction practices to be used to minimize noise.

As appropriate, the source(s) of the noise will be identified and additional noise reduction methods and supplies will be used including, but not limited to, those presented below:

- Relocate stationary equipment (if feasible) to minimize noise impacts on the community;
- Provide portable enclosures for stationary equipment and particularly noisy areas on the Site;
- Use self-adjusting ambient-sensitive back-up alarms, manually-adjustable alarms on low setting, use of observers, and/or schedule activities so that alarm noise is minimized;
- Install and maintain intake and exhaust mufflers on all equipment, particularly pneumatic impact tools;
- Install acoustically attenuating shields, shrouds, or enclosures on noise producing equipment;
- Line or cover hoppers, conveyor transfer points, storage bins and chutes with sound-deadening media;
- Minimize the use of air or gasoline-driven hand tools;
- Maintain all equipment such that parts of vehicles and loads are secure against rattling and banging; and/or
- Use shields, impervious fences, or other physical sound barriers, to inhibit transmission of noise to sensitive receptors.

6.3 Vapor Extraction and Treatment

Prior to removal of the Raised Cap, a network of vapor extraction wells will be installed from the surface to above the groundwater table on the Raised Cap and surrounding vadose zone soil excavation area. These vapor extraction wells will be utilized to remove stagnant VOCs present in the Raised Cap material and vadose zone soils prior to excavation. The vapor stream will be treated through a combination of adsorption media, including zeolite and activated carbon. The soil vapor extraction and treatment system will be operated pursuant to a BAAQMD permit.

The system as currently developed consists of a network of vapor extraction wells each piped to a corresponding vapor extraction-blower unit (SVE Unit). Figure 6-2 shows a plan view of the soil vapor extraction area and the proposed locations for extraction wells, SVE units, and treatment system. The proposed well locations are based on preliminary design data and the spacing of the vapor extraction wells will be refined during preparation of the RDIP.

It is anticipated that up to three electric-powered SVE units will operate simultaneously to extract soil vapor from across the Site. The SVE units will consist of a positive displacement blower; a liquid-vapor separation tank with auto discharge pump and level switches to remove moisture from vapor stream; and a heat exchanger to allow vapor stream temperature adjustment for optimum treatment efficiency.

Effluents from each SVE units will be directed to the treatment system, which is anticipated to include both zeolite and granular activated carbon vessels to effectively capture the range of anticipated organic vapors. The effluent will not be thermally treated. Treated vapor with COC concentrations below BAAQMD's emission trigger levels will be discharged to the atmosphere. The treated vapor emission will be monitored per BAAQMD permit requirements.

The SVE and treatment system will operate for up to four weeks prior to initiation of excavation activities. During this time, the initially stagnant total VOC concentrations are expected to decrease and stabilize (as monitored at the influent of the vapor treatment system) to an equilibrium with mass transfer processes that are generating the vapors from VOCs absorbed to soil and dissolved in water. The extracted soil vapor will be field monitored for total VOC concentrations. When total VOC concentrations reach relatively stabilized levels, the extracted soil vapor will be sampled and the samples analyzed by a State-certified laboratory for VOC concentrations. These VOC concentrations will be compared to those modeled in the PHERA, and as appropriate VOC actions levels modified.

Portions of the SVE system will continue to operate as excavation activities are initiated with the removal of the Raised Cap and vadose zone soil excavation. Phased shutdown of the SVE system will be performed as the excavation proceeds to encompass the entire SVE area.

6.4 Removal of Raised Cap

After the implementation, operation, and subsequent removal of the vapor extraction system, the first stage of excavation will be the removal of the Raised Cap material, down to the underlying former building foundations and piping where encountered. The RDIP will present the techniques, supplies, and equipment to conduct the removal of the Raised Cap. The RDIP will be provided to DTSC for review prior to remedy implementation.

The combination of impacted soil, concrete rubble, and possibly other material will be loaded for off-site transport and disposal. It is estimated that approximately 7,000 cubic yards of Raised Cap material will be removed. It is anticipated that surface asphalt and some of the concrete can be segregated for off-site recycling. For evaluation purposes it is assumed that all other Raised Cap material will be hazardous waste and will therefore require transport under hazardous waste manifests to an appropriate disposal facility.

The types of heavy equipment anticipated to be used during removal of the Raised Cap will include:

- Tracked diesel-powered excavator to excavate soil and segregate concrete;
- Tracked diesel-powered excavator with hydraulic attachments (jack hammer & nibbler) for breaking and processing concrete foundations for shipment;
- Front-end loader, for placing excavated soil and processed concrete into a dump truck; and
- One or two 25-yard off road dump trucks, for transporting soil from the excavation to the stockpile area.

6.5 Shoring Along Horton Street

Due to Site constraints and the proximity of the excavation to Horton Street and Building 31, shoring systems will be required. The design for the shoring system(s) will be provided to DTSC as part of the RDIP. It is anticipated that two different systems will be utilized.

For areas along Horton Street with excavation up to 25 feet in depth, it is anticipated that a retaining wall utilizing a solider pile with lagging system will be constructed. The location of this deep shoring wall is presented on Figure 6-1 and will be approximately 60 feet in length.

Specialized equipment using vertical augers will be utilized to generate large-diameter boreholes on the Site along Horton Street. It is anticipated that the boreholes will be installed at approximately eight-foot centers. In the area of vadose zone excavation, the boreholes will be less than 25 feet deep (typical depth of the A/B aquitard). In the area of the saturated zone excavation, the boreholes (a total of nine) will be approximately 50 feet deep.

Soldier piles will be installed in the bottom of the boreholes. In the area of the vadose zone excavation, it is anticipated the soldier piles will be up to 25 feet deep with the lower portion encased in structural concrete. In the area of the saturated zone excavation, it is estimated the soldier piles will be about 50 feet long with the lower 25 feet encased in structural concrete. For these deeper soldier piles, boreholes will be installed using casing and bentonite slurry to control heave.

Excavation of vadose and saturated zone soils along Horton Street will be completed to allow installation of lagging between soldier piles as the excavation is lowered. The lagging will consist of steel plates behind the soldier pile flanges driven in advance of the excavation. As the excavation is advanced into the saturated zone, additional lagging will be installed.

As the excavation proceeds deeper into the saturated zone, a dewatering system will be implemented (see Section 6.6). Counterforts will be installed to provide lateral support to the retaining wall. Each counterfort will be perpendicular to the soldier piles and installed at alternating soldier piles (for a total of up to 6 counterforts). The length of counterfort slots is estimated at 25 to 35 feet and the depth will be to the top of the A/B aquitard. Fill slots will be filled to form the counterfort buttresses for the soldier pile wall. After installation of the counterforts, the saturated soil between the counterforts will be excavated, to a maximum depth equal to the depth of the counterforts. Details on excavation implementation are discussed in Section 6.7.

For areas along the west side of Building 31, vadose zone soil along the building will be excavated and sloping, instead of retaining wall utilizing soldier piles with lagging system, will be installed. The slope will have a horizontal to vertical distance ratio of 1.5: 1 outside the base of building 31's footing. After installation of the slope, the vadose zone soil in areas north of building 31 will be excavated.

It is anticipated that the entire shoring activity, including soil excavation and handling, will take up to four weeks. After this has been completed, remaining saturated soils will be excavated. Shoring on other sides of the excavation will consist of benching and over-excavating with a 1.5:1 horizontal to vertical slope.

Upon completion of excavation/backfilling, counterforts will be removed and soldier piles will be cut flush to the surface.

6.6 Excavation Dewatering

Dewatering of the excavation will consist of using one or more sump pumps installed at the bottom of the excavation on the S-W property. Water collected within the sump(s) will be pumped to the Dewatering Equipment Storage and Pretreatment Unit, and subsequently the groundwater treatment system (Figure 6-1). By pumping water from sumps installed on the S-W property, the water table on the S-W property will be lower compared to the former Rifkin property, inducing groundwater flow towards the S-W property. As a result, contaminated groundwater from the S-W property will not migrate towards the former Rifkin property. Based on groundwater pump tests conducted at the Site, it is anticipated that a maximum of 10 gallons per minute of groundwater will be generated from the dewatering system.

Groundwater extracted from the sump will be conveyed into a dewatering settling tank system (the Dewatering Equipment Storage and Pretreatment Unit) and subsequently pumped to the existing and/or a new groundwater treatment system prior to discharge to Temescal Creek or to the POTW under permit, or transported

offsite for treatment and disposal/reuse. Figure 6-1 presents the preliminary locations of the pretreatment and treatment units. The final layout is subject to refinements during preparation of the RDIP and will be established by the remediation contractor.

The excavation dewatering activities will be limited to the A-zone aquifer and are anticipated to have a de minimis effect on the distribution of contaminants in groundwater near the Site.

6.7 Soil Excavation and Handling

Approximately 57,000 cubic yards of soil will be excavated for off-site disposal. Some of the excavated soil is anticipated be hazardous waste and will require transport under hazardous waste manifests to an appropriate disposal facility. The RDIP will present the techniques, supplies, and equipment to conduct the excavation and soil handling activities. The RDIP will be provided to DTSC for review prior to remedy implementation.

The types of heavy equipment needed during soil excavation are anticipated to include:

- Tracked diesel-powered excavators;
- Front-end loaders, for managing stockpiles and placing excavated soil into a dump truck;
- Two or more 25-yard off road dump trucks, for transporting soil from the excavation to the stockpile staging area;
- Dewatering system including sump within the excavation, above-ground pump, settling tank system, and groundwater treatment system (treated water will be discharged to Temescal Creek);
- Water trucks for spraying/misting for dust control; and
- Foam unit for applying vapor suppressant foam.

Vadose zone soil on the S-W and former Rifkin properties will be excavated in order to achieve the vadose zone soil cleanup for arsenic of 24 mg/kg on each property. The planned vadose zone excavation limits are presented on Figure 6-1. The planned limits of soil excavation extend approximately 285 feet along Horton Street (60 feet on the former Rifkin property and 225 feet on the S-W property) and approximately 330 feet west of Horton Street, or approximately 95,000 square feet. In addition, elevated detections of arsenic in vadose zone soil are present at locations outside these limits, including SA-AH-01 (110 mg/kg), SB-7AB (130 mg/kg), CDM-SB50 (200 mg/kg), and SA-BH-04 (211 mg/kg). Vadose zone soil surrounding these locations would also be removed to a radius of 10 feet surrounding each location. The vadose zone soil would

be excavated to an average depth of approximately 7.5 feet, the approximate depth to groundwater across this area.

Confirmation sampling and analysis, as described in Appendix H, would be conducted to confirm that the vadose zone soil cleanup goal for arsenic is met. In order to meet this goal, additional, excavation beyond the limits presented above may be needed.

In addition to vadose zone soil, the excavation includes removal of saturated zone soil identified as source of COCs to groundwater (CDM, 2009b). The planned saturated zone excavation limits are presented on Figure 6-1. The source area saturated soils would be removed down to the A/B aquitard (approximately 25 feet bgs) on the S-W property and to 18 feet bgs on the former Rifkin property. Confirmation of final source area removal extents will be based on geologic observation for permeable materials along the sidewalls of the excavation below the groundwater table.

6.8 Waste Stockpiles

Waste stockpiles will be used during remedy implementation. The design criteria for managing the stockpiles will be detailed in the RDIP and is anticipated to include the following:

- The waste stockpiles will be located on the former Building 35 concrete slab.
- If additional area is needed, additional waste stockpiles will be located on areas covered by existing asphalt pavement, as shown on Figure 6-1. The final layout is subject to refinements during preparation of the RDIP and will be established by the remediation contractor.
- This exterior paved area will first be inspected for cracks, and repairs will be made as necessary to create or maintain an integral surface.
- Berms and lined cement barriers (i.e., k-rails) will be constructed around the waste stockpile area as needed to control possible water run-on and runoff. The existing surface grade and pumping system will be used to control and capture water. The design of berms around these areas, and the construction supplies used for the berms & barriers, will be provided in the RDIP.
- Any accumulated water within the bermed area(s) will be pumped into a dewatering settling tank and subsequently pumped to the groundwater treatment system prior to discharge or off-site disposal.
- Waste stockpiles will be covered with nylon-reinforced polyethylene or sprayed with stabilizing foam each night, on weekends, and all other non-work days, or when the pile is not being actively worked. If polyethylene covers are used they will be secured with ties or a sufficient number of sandbags or other weighted objects designed to keep the cover in place.

- While the stockpiles are in operation, the berms and cover will be inspected several times daily, including non-work days, to detect evidence of tears, loose seams, punctures, and the presence of water and proper functioning of water collection and removal systems.

The use of waste stockpiles is intended to accommodate scheduling imbalances between relatively continual excavation activity and intermittent loading and transport as well as allow for sampling and profiling as described in Appendix I. It is anticipated that the volume of stockpiled material will be equivalent to 5 days of excavation, i.e., up to an estimated 5,000 cubic yards. If the rate of accumulation exceeds this amount, excavation activities will be slowed down and, if possible, loading and transport activities will be accelerated until material handling flow rates are approximately equal.

6.9 Loading and Off-Site Transport

Materials removed from the Site for off-site disposal is anticipated to vary in waste classifications. The determination of waste classifications will be made in accordance with applicable regulations and disposal facility acceptance criteria.

The testing, manifest tracking, and record-keeping requirements will be conducted in accordance with Title 40 CFR Section 268.7 and 22CFR Chapter 18, Article 332 CCR. A manifest will be generated for each load of hazardous waste leaving the Site. The weight of material will either be recorded by on-site scales, or will be estimated at the Site and confirmed by weigh tickets generated at the receiving disposal facility. The manifest will be signed by an authorized S-W representative or agent and will accompany the load of material to the disposal facility.

Materials removed from the Site will be transported by rail and/or truck. The RDIP will identify the techniques, supplies, and equipment needed to perform the loading and transport of the materials. The RDIP will be provided to DTSC for review prior to remedy implementation. General descriptions of loading and transport activities for each transport modes are discussed below.

6.9.1 Rail Car

To the extent possible, materials removed from the Site will be loaded into rail cars for transport for off-site disposal. Rail cars may be loaded on the existing spur track within the Site as shown on Figure 6-1. However to maintain efficient production, an additional rail spur on the S-W property may be needed. To the extent rail cars can be used for off-site transport, S-W will work with UPRR and the transport/disposal contractor to utilize the UPRR Emeryville Yard tracks for rail car staging. Both empty rail cars and rail cars containing excavated soil would be staged at the UPRR Emeryville Yard tracks.

The estimated duration of rail car loading is dependent on the availability and location of the rail cars.

It is anticipated that off-site transport of some portion of the materials removed from the Site may occur by truck. Not all disposal facilities accept material by rail car as they are not located along railroads.

6.9.2 Truck

Figure 6-1, Preliminary Site Layout and Controls, depicts the plan for trucking of excavated materials off-site and the trucking of clean backfill onto the Site. The final layout is subject to refinements during preparation of the RDIP and will be established by the remediation contractor.

If all materials removed from the Site were to be trucked, the duration for truck loading and off-site transport is estimated at 9 to 18 weeks. This duration is based on the approximate 64,000 cubic yards of materials to be excavated, an in-place material density of 1.4 tons per cubic yard, 20 tons of material per truckload, and 50 to 100 truck trips per day. The actual rates of loading will vary due to on-site logistics and/or truck availability.

Material will be loaded into truck trailers, which will be covered and secured prior to leaving the Site to limit dust or odor emissions. Truck and trailer wheels will be decontaminated and inspected prior to leaving the Site. A Transportation Plan will be prepared in accordance with Health and Safety Code Section 25169.3 and DTSC's Guidance for Developing Transportation Plans for Removal or Remedial Actions (DTSC, 2001). The Transportation Plan will present the procedures to be used by the hauler to protect the public during the transportation process. Specific aspects to be addressed in the Transportation Plan include: container selection, Site entry and egress, routing and supervision of transportation activities. The Transportation Plan will be included in the RDIP for review and approval by DTSC.

It is anticipated trucks will approach the Site northbound on Halleck Street to Sherwin Avenue, and then enter into the property, as shown on Figure 6-1. Once on-site, the trucks will follow roadways identified by the contractor. It is anticipated that loaded trucks will leave through the plant truck entrance north of former building 35, cross the easement on the City's property and proceed southbound on Halleck Street, across Park Avenue, under 40th Street, and south to 32nd Street. From 32nd Street, trucks will access Mandela Parkway to Grand Avenue and freeway connections. Necessary traffic or encroachment permits for use of these streets will be obtained from the Cities of Emeryville and Oakland. Figure 6-3, Preliminary Truck Transportation Route Map, shows the regional truck route anticipated for transport of excavated materials from the Site and backfill to the Site.

6.9.3 Decontamination

A decontamination station will be setup (see Figure 6-1) at the Site. During excavation and material handling activities, equipment and vehicles will be decontaminated and inspected prior to leaving the Site. Trucks, rail cars, and equipment will be decontaminated using dry brush and/or wet rinsing. Rinse water will be collected, tested, and disposed of in accordance with applicable regulatory

requirements. Trucks, rail cars, and equipment exiting the Site will be inspected and logged for compliance with the Site decontamination requirements.

6.10 Slurry Wall Breach and Extension

As excavation and backfill operations are nearing completion, the slurry wall will be breached in two locations along the western, down gradient property boundary and one up gradient location near the north end of former building 35, and extend the existing slurry wall south along the western property boundary to Sherwin Avenue (see Figure 6-1). The detailed design for the slurry wall breaches and extension will be provided to DTSC prior to remedy implementation as part of the RDIP. General descriptions of these activities are discussed below.

The existing slurry wall will be breached to provide an outlet for groundwater that accumulates within the formerly closed slurry wall system, or to provide a pathway for groundwater flow from areas outside the formerly closed slurry wall system into these areas, specifically the arsenic-impacted groundwater in the vicinity of well LF-3.

The slurry wall breaches will consist of three components: an upgradient collection zone; a connector zone crossing the existing slurry wall; and, a distribution zone to disperse the flow back into the regional flow system. The locations for the slurry wall breaches have been selected to be placed in areas where permeable soils are present to provide a hydraulic connection with the existing groundwater flow. Figure 6-1 presents the locations of the breaches and Figure 6-3 presents details of the slurry wall breaches.

The upgradient, or the collection portion, of the breach system will be excavated to the top of the A/B aquitard, using an appropriate method to maintain the stability of the excavation and allow placement of a high permeability backfill (i.e., a graded sand or gravel) and drain pipe. A drain pipe will be placed at a depth of 5 feet below the seasonal low water table (approximately 0 feet NAVD88). This collector trench will be installed a minimum of 10 feet upgradient of the confirmed location of the existing slurry wall, approximately parallel to the orientation of the wall. The downgradient distributor trench will be constructed in a similar manner on the downgradient side of the existing slurry wall. This distributor trench will overlap the upgradient collector trench by approximately 30 percent of its length. Two to three connector trenches will be excavated, using the same methods, to a minimum depth of 2 feet below the elevation of the drain pipe in the collector and distributor trenches (approximate trench bottom elevation of -2 feet NAVD88). These connector trenches will be excavated to cross the slurry wall at a right angle, and intersect the collector and distributor trenches. The connector trenches will also include the drain pipe, which will either be directly connected to the drain pipes in the adjacent trenches, or be placed in contact with the other lines in the open trench to allow efficient hydraulic communication between all segments of the breach system.

The backfill in the breaches will consist of a graded sand or gravel to control the potential mobilization of fines from the formation into the trenches. The permeability of this backfill will be specified at a minimum of 500 ft/day. Piezometers will be installed into the collector and distributor trenches to allow monitoring of the hydraulic performance of the breaches.

The slurry wall breach backfill will be delivered by truck. It is estimated 35 truckloads of backfill will be needed for the breaches.

In conjunction with the breaching operation, the existing slurry wall will be extended south along the western property boundary to Sherwin Avenue (see Figure 6-1). This wall extension will modify groundwater flow through the upgradient slurry wall breaches. It is anticipated that this slurry wall will be constructed using a long reach tracked excavator and the installation of a bentonite slurry mixture or flexible membrane. As with the breaches, the excavated material will be sampled and if found acceptable will be reused on-site. If off-site disposal is required and the material is transported by truck, approximately 70 truckloads will be required. On-site mixing and staging of bentonite slurry may be performed in the area designated as the waste staging area (see Figure 6-1). The importation of the bentonite slurry will require the delivery of approximately 70 truckloads.

Together, the three slurry wall breaches, surrounding existing slurry wall segments along Temescal Creek channel and UPRR tracks, and the slurry wall extension will be used to control groundwater flow at the Site. The other existing slurry wall segments that will remain after remedy implementation, along the former Rifkin property boundary and within the Site, are not required to maintain appropriate groundwater flow conditions. Groundwater monitoring to assess the performance of the slurry wall segment and breach system is discussed in Section 7.

6.11 Excavation Backfilling

Backfilling below the groundwater table will occur concurrently with excavation. Geotechnically appropriate backfill will be delivered to the Site in trucks or rail cars. Figure 6-3, Preliminary Truck Transportation Route Map, shows the regional truck route proposed for transport to and from the Site.

If possible, backfill will be brought to the Site in the trucks or rail cars used for off-site disposal of excavated materials. Backfill stockpiles will be kept separate from the waste stockpiles (see Figure 6-1). The RDIP will present the techniques, supplies, and equipment needed to perform the backfilling activities.

Truck traffic into and out of the Site will follow the Transportation Plan and as described in Section 6.9. Import fill will be unloaded on-site. It is anticipated that one or more loaders and 25-yard off road trucks will be used to move fill from the stockpile area to the excavation for placement and compaction.

As shown on Figure 6-1, the majority of the areas undergoing excavation will be backfilled with low-permeability backfill (approximately 0.283 ft/day). The remaining area will be backfilled with high-permeability fill backfill (approximately 28.3 feet/day). The high-permeability backfill will be placed downgradient of an interceptor trench and will serve to collect and distribute groundwater into the surrounding formation. During backfill operations of the saturated zone, a reagent (e.g., organic-based tannin or inorganic powdered sulphite) will be added with the backfill. The purpose of the reagent is to act as an oxygen scavenger to control oxidation-reduction conditions in the subsurface. Increased oxidation has the potential to mobilize solid phase arsenic that may be present in the surrounding, natural formation. The reagent will be selected to minimize potential detrimental impacts to the soil or groundwater quality and to avoid generating odors. The RDIP will present the techniques and equipment needed to confirm the backfill operations meet the designed permeability values.

As part of the selected remedy, a contingency would be to pump from the high-permeability backfill and/or trench, if needed, to direct groundwater flow toward the S-W property. As such, backfill design considerations for both the S-W property and the former Rifkin property will be included as part of the RDIP.

During backfill operations, an interceptor trench will be placed on the S-W property, adjacent to the S-W/Rifkin property boundary as shown on Figure 6-1. A membrane barrier will be placed on one side of the trench, along the property boundary, to prevent groundwater flow toward the former Rifkin property. The trench will be approximately 30 inches wide, approximately 25 feet deep and be located as shown on Figure 6-1. The trench will be backfilled with 3/8 inch minus backfill and contain a basal perforated pipe to reduce flow resistance from the backfill. With this design, the trench will have an effective permeability of approximately 500 ft/day. The trench will be closed on the Horton Street side with the membrane barrier. The membrane barrier will be tied into the aquitard without compromising its integrity, i.e., the excavation will be limited in extent and, as appropriate, conducted through slurry to maintain adequate downward force to prevent heaving.

Final surface elevation following excavation and backfill will conform to redevelopment plans, if appropriate, and/or target Site elevations, to the extent practical. If redevelopment construction will not immediately follow completion of remedy implementation, then the S-W property will be graded to an elevation consistent with the Horton Street sidewalk and the adjoining Site elevation along the rail spur. The area will be sloped and re-paved and/or vegetated, and would direct water runoff along the Site surface towards the Temescal Creek channel. The remaining portions of the spur track outside of the excavation limits will be removed and/or paved as part of remedy implementation. The former Rifkin property will be backfilled to a final elevation consistent with the remaining parking area, repaved, and striped.

6.12 Reporting

During remedy implementation activities, summaries of work activities will be provided to DTSC. These summaries will include material excavation locations, results from waste characterization of excavated materials, results from confirmatory soil samples, and results from air monitoring and sampling.

After remedy implementation is completed, a completion report will be prepared and submitted to DTSC. The report will document all activities performed, including definition of the actual extent of excavation, collection of soil samples, classification and/or treatment of waste, final disposition of waste, air monitoring and sampling, and all analytical reports of waste characterization, soil confirmatory samples, and air sampling.

Photographic documentation will be provided including pictures of excavated materials prior to removal and the final configuration of the excavation. The report will detail deviations from this RAP or the RDIP, if any, and provide an explanation for the deviations.

Table 6-1
Summary of Engineered Controls for Short-Term Exposure Risks
Sherwin-Williams Emeryville Remedial Action Plan

Implementation Activity	*Dust Control*	*Vapor Control*	*Surface Water Runoff Control*
Excavation	Water sprays/mist, surfactants, wetting agents, dust suppressants, covers, and windscreens.	Water spray/mist, vapor suppressant foam, covers, and vapor extraction and treatment.	Water runoff entering excavation will be pumped to holding tanks and pretreatment prior to being routed to a groundwater treatment system along with other water from excavation dewatering.
Shoring	Water spray/mist system.	Shroud over auger to collect vapors and direct vapors through treatment system, if needed, and/or use of vapor suppressant foam or vapor oxidation media will be applied.	Berms will divert surface water runoff contacting Site materials towards the excavation so it may be collected and sent to groundwater holding and treatment system.
Stockpiling and Handling	Water spray/mist; covers on stockpiles; slow vehicle speeds to control dust.	Vapor suppressant foam, vapor oxidation media, covers, and vapor extraction and treatment.	Berms and lined k-rail barriers will divert water runoff from contaminated stockpiles towards the excavation so it may be collected and sent to groundwater holding and treatment system. Berms and k-rail will divert water runoff from clean backfill stockpiles through filter system for discharge to surrounding storm water system.
Loading	Water spray/mist; covers over loaded trucks and/or rail cars; slow vehicle speeds to control dust; minimize drop heights during loading.	Bag contaminated soils in transports. Covers over loaded trucks and/or rail cars; minimize drop heights during loading.	Berms will divert water runoff contacting contaminated Site materials towards the excavation so it may be collected and sent to groundwater holding and treatment system.
Backfilling	Water spray/mist.	Not Applicable.	Berms will divert water runoff away from the excavation. Excess precipitation into the excavation will be pumped so it may be collected and sent to groundwater holding and treatment system.

Table 6-2
Action Levels for Volatile Organic Compounds
Sherwin Williams Emeryville Remedial Action Plan

Volatile Organic Compounds	BAAQMD Regulatory Limit ($\mu g/m^3$)	AIHA Odor Threshold ($\mu g/m^3$)	Selected Noncancer Performance Standards[1] ($\mu g/m^3$)	Selected Cancer Risk-Based Performance Standards[1] ($\mu g/m^3$)	Selected Subchronic Action Level in Air[2] ($\mu g/m^3$)	Selected Acute Action Level in Air[3] ($\mu g/m^3$)
Volatile Organic Compounds						
Benzene	60	4,792	10	0.6	0.6	29
1,2-Dichloroethane	NE	45,331	607	0.03	0.03	45,331
Ethylbenzene	2,000	9,986	608	8.9	8.9	9,986
Methyl ethyl ketone	NE	737	1,000	NA	737	737
Tetrachloroethylene	35	41,852	88	0.2	0.2	1,358
Toluene	300	603	1,167	NA	300	603
Trichloroethylene	600	7,309	90	0.7	0.7	7,309
1,2,4-Trimethylbenzene	NE	11,798	12	NA	12	11,798
1,3,5-Trimethylbenzene	NE	11,798	12	NA	12	11,798
Vinyl chloride	26	647	19	0.01	0.01	647
Xylenes	700	1,302	434	NA	434	1,302
Total Volatile Organic Compounds[4]					1,505	

BAAQMD - Bay Area Air Quality Management District Rules and Regulations.

AIHA - American Association of Industrial Hygienists, 1989, Odor thresholds for Chemicals with established occupational health standards.

NE - Not established.

NA - Not applicable.

levels.

2. Selected Subchronic Action Level in Air is based on the more stringent of the BAAQMD regulatory limit, MRL, AIHA odor threshold, and the cancer and noncancer perform

3. Selected Acute Action Level in Air is based on the more stringent of the BAAQMD regulatory limit, MRL, AIHA odor threshold, and Cal/EPA RELs.

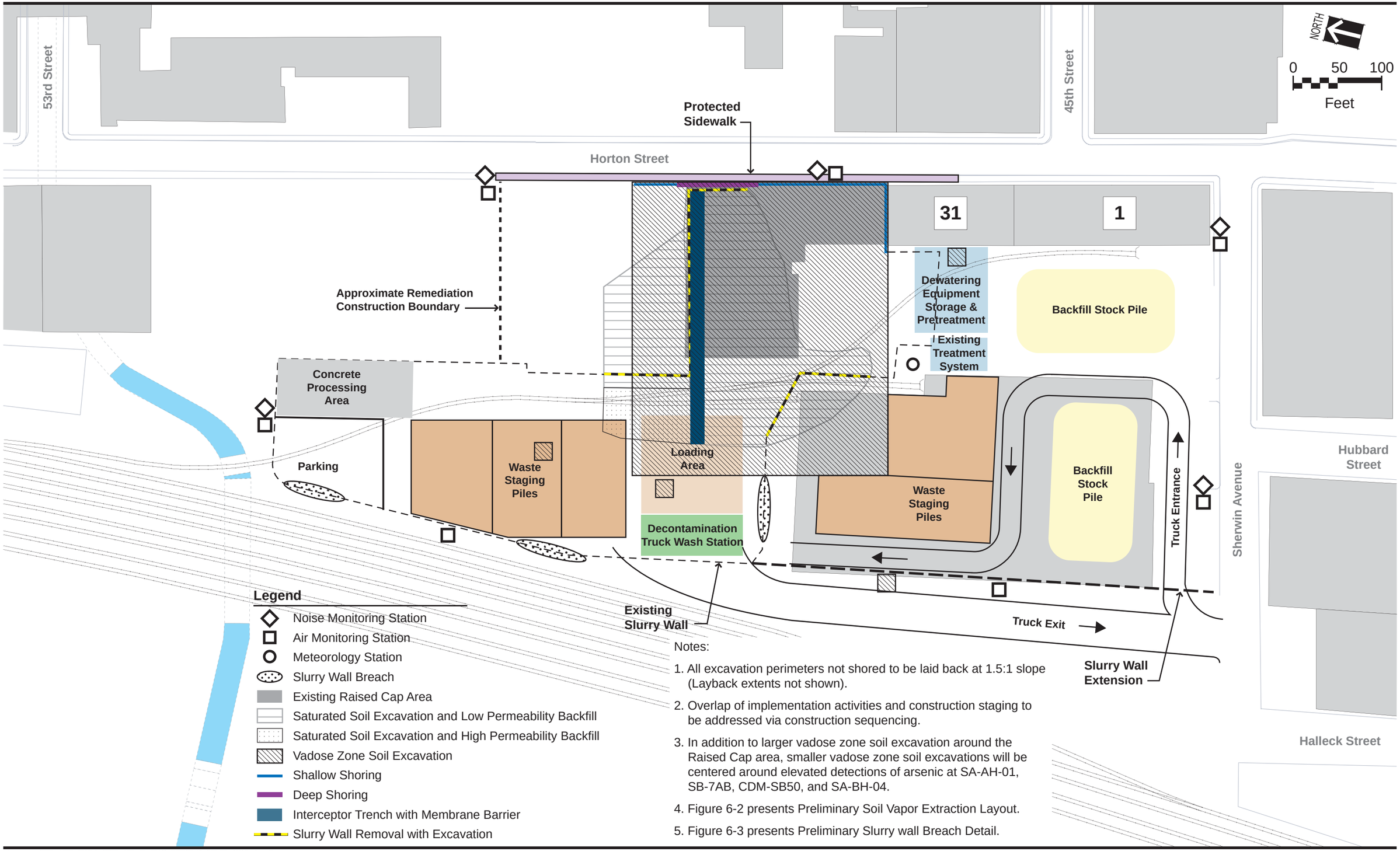
4. Total VOCs Action Level is based on the total sum of each VOC Action Level.

Table 6-3
Action Levels for PM10, Arsenic, and Lead
Sherwin Williams Emeryville Remedial Action Plan

Chemical	Source Concentration (mg/kg)	BAAQMD Regulatory Limit ($\mu g/m^3$)	Performance Standard ($\mu g/m^3$)	Action Level as PM_{10} in Air ($\mu g/m^3$)
Arsenic Acute REL-Based Performance Standard [1]				
Raised Cap Materials	110,000	NA	0.2	1.8
Vadose Zone Soils	3,898	NA	0.2	51
Soils for Shoring Installation	1,237	NA	0.2	162
Saturated Soils	3,782	NA	0.2	53
Arsenic Subchronic Risk-Based Performance Standard [2]				
Raised Cap Materials	110,000	NA	0.015	0.6
Vadose Zone Soils	3,898	NA	0.015	16
Soils for Shoring Installation	1,237	NA	0.015	51
Saturated Soils	3,782	NA	0.015	17
Other Performance Standards [3]				
Lead Subchronic Performance Standard	4,687	0.15	NA	134
Total PM_{10} Subchronic Performance Standard	NA	50	NA	50

BAAQMD - Bay Area Air Quality Management District Rules and Regulations.
REL - Reference Exposure Level
NA - Not applicable.

1. Based on arsenic acute inhalation REL and arsenic concentration in each excavation event.
2. Based on arsenic risk-based performance standard and arsenic concentration in each excavation event.
3. Lead is based on National Ambient Air Quality Standard for chronic exposure. Total PM_{10} based on chronic exposure, per BAAQMD rules and regulations.



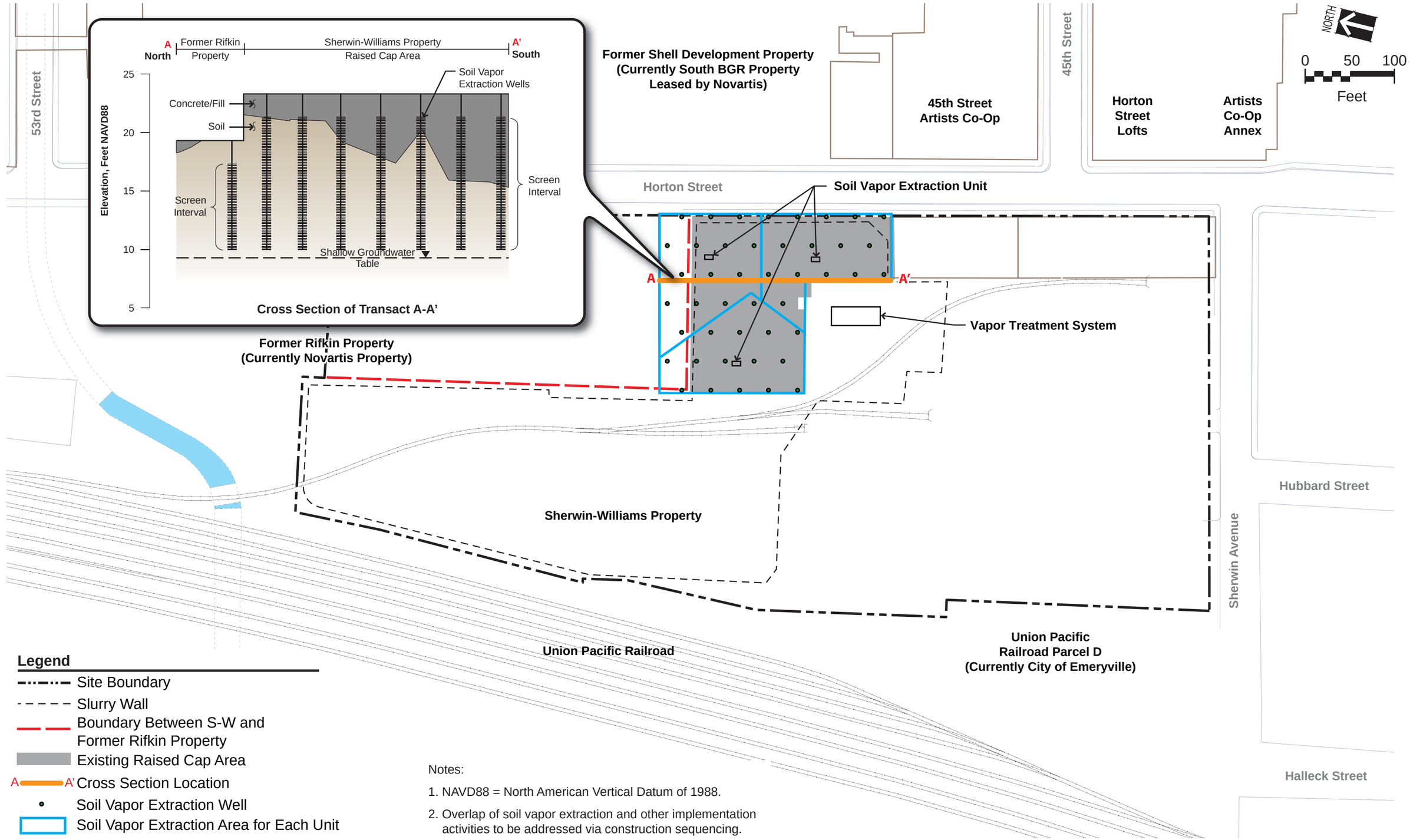
Notes:

1. All excavation perimeters not shored to be laid back at 1.5:1 slope (Layback extents not shown).
2. Overlap of implementation activities and construction staging to be addressed via construction sequencing.
3. In addition to larger vadose zone soil excavation around the Raised Cap area, smaller vadose zone soil excavations will be centered around elevated detections of arsenic at SA-AH-01, SB-7AB, CDM-SB50, and SA-BH-04.
4. Figure 6-2 presents Preliminary Soil Vapor Extraction Layout.
5. Figure 6-3 presents Preliminary Slurry wall Breach Detail.

W:\REPORTS\Sherwin-Williams\Emeryville\Remedial Action Plan\Graphics\Preliminary Site Layout and Controls (Fig 6-1).ai 05/11/10 JJT

CDM

Figure 6-1
Preliminary Site Layout and Controls
Sherwin-Williams Company - Emeryville, California



Legend

- Site Boundary
- Slurry Wall
- Boundary Between S-W and Former Rifkin Property
- Existing Raised Cap Area
- A — A' Cross Section Location
- Soil Vapor Extraction Well
- Soil Vapor Extraction Area for Each Unit

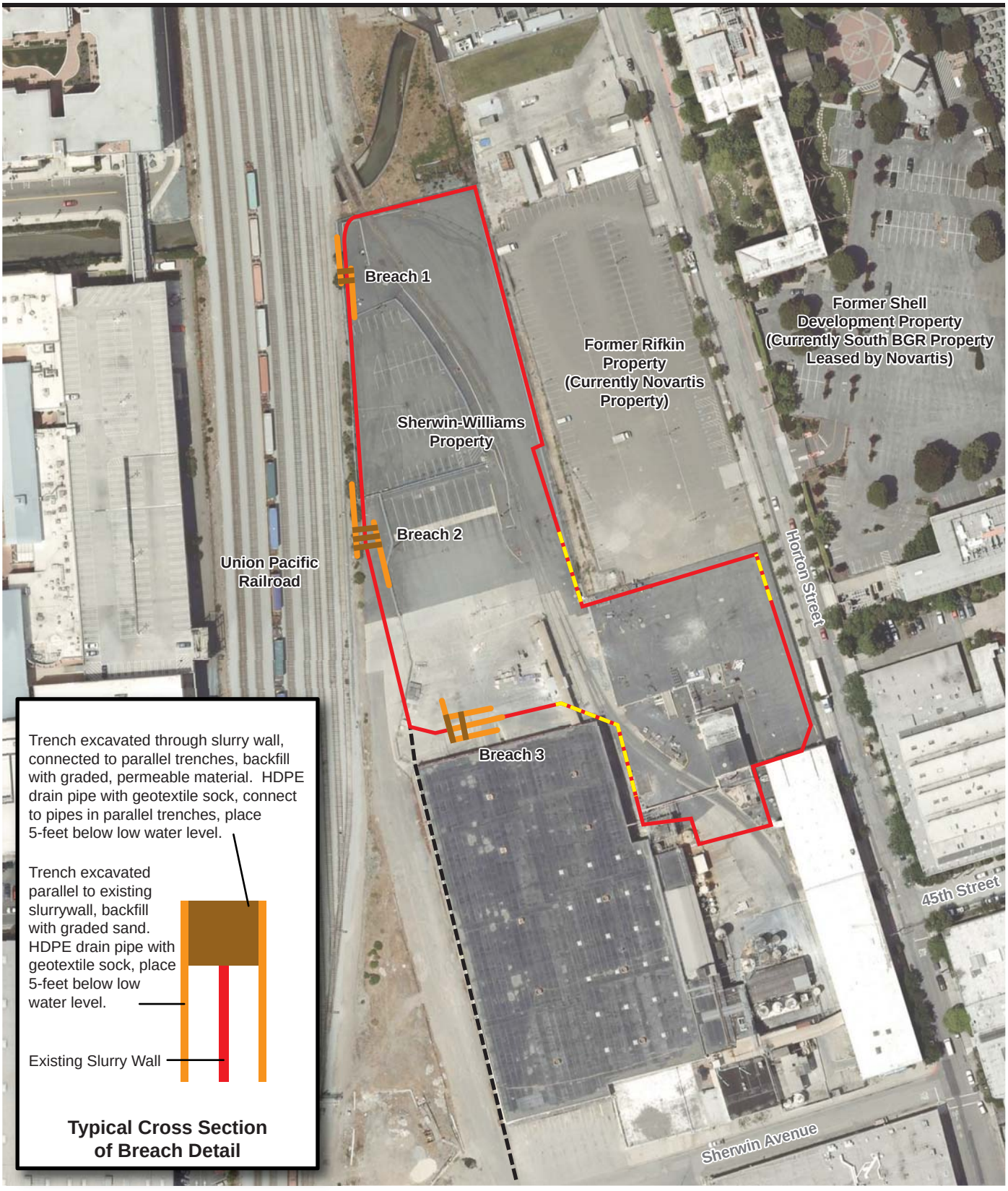
Notes:

1. NAVD88 = North American Vertical Datum of 1988.
2. Overlap of soil vapor extraction and other implementation activities to be addressed via construction sequencing.

W:\REPORTS\Sherwin-Williams\Emeryville\Remedial Action Plan\Graphics\SVE_Site_plan(Fig6-2).ai 05/11/10 JJT

CDM

Figure 6-2
Preliminary Soil Vapor Extraction Layout
Sherwin-Williams Company - Emeryville, California



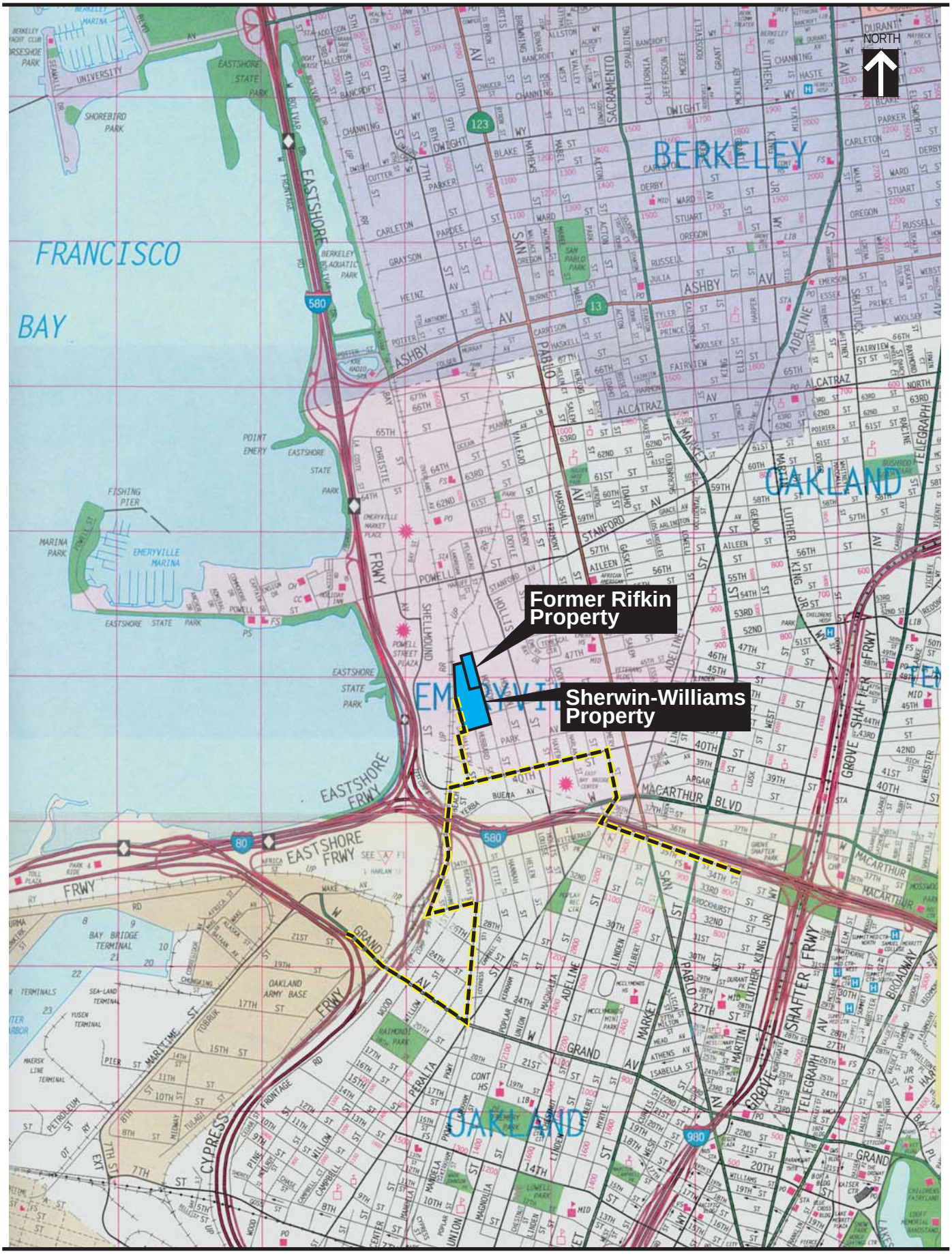
W:\REPORTS\Sherwin-Williams\Emeryville\Remedial Action Plan\Graphics\Slurry Wall Breaches (Fig6-3).ai 05/11/10 JJT

Figure 6-3

Preliminary Slurry Wall Breach Detail

Sherwin-Williams Company - Emeryville, California

CDM



W:\REPORTS\Sherwin-Williams\Emeryville\Remedial Action Plan\Graphics\Prelim Truck Transportation (Fig6-4).ai 05/11/10 JJT

Figure 6-4

Preliminary Truck Transportation Route Map

Sherwin-Williams Company - Emeryville, California

CDM

Section 7
Post Remediation Monitoring

This section presents descriptions of the anticipated post remediation activities. These activities will include OM&M of installed components, including a Land Use Covenant (LUC); groundwater monitoring; remedy effectiveness evaluation; and, annual reporting.

7.1 Operations, Maintenance, and Monitoring Program

Along with the remedy implementation completion report (as discussed in Section 6.12), an Operations, Maintenance & Monitoring Plan ("OM&M Plan") will be submitted to DTSC after remedy implementation. The OM&M Plan will outline provisions for long-term operations, maintenance, and monitoring (OM&M) of installed components of the remedy. These components include the surface cover, slurry wall and breach system, interceptor trench with membrane barrier, groundwater monitoring well network, and a LUC. A draft of the OM&M Plan will be included with the RDIP for DTSC review.

The OM&M Plan will present background information on Site conditions, remedial actions, and residual COCs in the subsurface above cleanup goals. The OM&M Plan will include Site maps depicting areas of known subsurface COC extents. The OM&M Plan will provide a soil gas evaluation strategy, soil management plan and updated construction HASP for potential post-remediation activities (e.g., Site development). The OM&M Plan will include financial assurance for OM&M of the installed components and an agreement between Site property owners for continued access.

7.1.1 Soil Gas Evaluation

The OM&M Plan will outline the strategy, locations, methods, and protocols for evaluating soil gas conditions at the Site after excavation and backfilling are completed. In addition, the plan will include appropriate engineering controls that would be implemented as part of redevelopment if post-excavation sampling reveals that residual soil gas is present above indoor air protective levels. Engineering controls could include: increased building indoor air ventilation; sub-slab depressurization; and/or vapor barriers in combination with other controls.

7.1.2 Soil Management

During post-remediation activities (e.g., Site development) and OM&M, soil and/or groundwater containing residual Site COCs may be encountered. The OM&M Plan will outline the procedures for managing soil and groundwater generated from Site activities, including: dust control; excavated soil stockpile management; soil sampling procedures and disposition characterization procedures; and, groundwater dewatering and treatment. In addition, the OM&M Plan will outline procedures for implementing storm water pollution control measures at the Site during construction

activities and Site maintenance activities. Best management practices to control storm water runoff at the Site will include, where necessary: 1) covering of soil stockpiles; 2) berming the Site to contain runoff; 3) installation of storm drain filters to remove sediments prior to discharge; and 4) installation of hay bales at appropriate locations to contain storm water runoff and to enhance settling of solids. The OM&M Plan will include a listing of agencies to be notified prior to initiating onsite activities, which may expose or disturb soil or groundwater containing residual Site COCs.

7.1.3 Health and Safety

The HASP will address worker health and safety during implementation of future activities that require excavation in areas of the Site where residual COCs are present. The HASP will provide personal air monitoring requirements during subsurface activities, dust control, and PPE. The HASP will be prepared in accordance with Occupational Health and Safety Administration (OSHA) 29 CFR 1910.120 guidelines and Title 8 CCR Section 5192. The HASP will be submitted separately detailing health and safety procedures, compliance with OSHA and air monitoring during construction.

7.1.4 Site Maintenance

Current and future owners, occupants, managers, and contractors, who are delegated or authorized to perform property maintenance or construction will be required to comply with the measures identified in the OM&M Plan for long-term maintenance of the Site. The provisions of the Site maintenance will also be incorporated into the LUC.

7.1.5 Land Use Covenants

As part of the OM&M Plan, Land Use Covenants (LUCs) will be recorded to identify specific land use restrictions associated with the Site. The LUCs will preclude owners, operators or occupants of the property from drilling, boring, or otherwise encountering the water table through excavation or other means unless expressly permitted in writing by the DTSC.

The LUCs will require that the Site be developed in a manner that maintains and preserves the integrity of the remedy, allows OM&M of installed features of the remedy, controls potential future human exposure to residual COCs in the subsurface, and controls potential future pathways from the Site to Temescal Creek channel (e.g., storm sewers). The LUCs will also require future utilities to be placed above the groundwater table, or with engineering controls if below the groundwater, to limit potential preferential movement of groundwater toward Temescal Creek channel along the utilities. Future development must be consistent with the assumptions for future use of the Site that were developed to constrain the groundwater model design conditions on which the remedy is based, particularly for implementation of natural attenuation to achieve the cleanup goals within a reasonable time period (CDM, 2009b).

The LUCs will be designed so that future owners/occupants will not have direct contact with the shallow groundwater during either redevelopment or future use unless permitted in writing by the DTSC. The LUCs will include language that indicates owners or occupants of the property should not drill, bore, otherwise construct, or use a well for the purpose of extracting water for any use, including, but not limited to, domestic, potable, or industrial uses, unless expressly permitted in writing by the DTSC. It will also require access to and non-interference with installed features of the remedy and the groundwater-monitoring network. In addition, the LUCs will also require unfettered access to and non-interference with the DTSC's access to the Site to conduct inspections, surveillance, monitoring or other activities necessary to protect public health safety or the environment.

Engineering controls will be used to support the LUCs. When the Site is developed, engineering controls will be used to limit surface water infiltration and potential exposure to residual COCs at the Site. Engineering controls will consist of the use of hardscape surfaces, including soil, asphalt, concrete, aboveground planters and building foundations.

The LUCs will not preclude redevelopment of the former Rifkin property in a manner consistent with the Novartis (formerly Chiron) Preliminary Development Plan (PDP) approved by the City of Emeryville on June 7, 1996. The PDP includes a high-rise tower option with installation of piles and pile caps (CDM, 2009b).

7.2 Groundwater Monitoring Program

A Groundwater Monitoring Plan will be prepared that outlines provisions for a long-term groundwater monitoring program. The purpose of the groundwater monitoring program is to collect data to evaluate the effectiveness of the soil excavation, backfill, and slurry wall breaches/extension. The effectiveness of this remedy will be evaluated based on its ability: (1) to promote natural attenuation of residual COCs in groundwater, primarily arsenic; (2) to achieve Site cleanup goals within a reasonable timeframe; and (3) to control groundwater movement through the Site without producing long-term groundwater mounding.

The groundwater monitoring program will consist of:

- Designation of a well network;
- Collection and evaluation of depths to groundwater and concentrations of COCs in groundwater in the well network;
- Development of criteria and methodologies to evaluate data that are collected; and
- Development of contingency actions with a decision framework for their initiation.

To the extent feasible, depths to groundwater and concentrations of COCs will be evaluated in the same monitoring well network. Statistical analysis will be used to

evaluate trends in the concentration data. The depth to groundwater, and COC concentrations and concentration trends will be evaluated to determine if contingency action(s) are needed to achieve Site cleanup goals.

Based on the timing and nature of future redevelopment and future construction activities, and/or results from the groundwater monitoring program, it may be necessary to modify the groundwater monitoring network or monitoring requirements at some point in the future. As such, at any time after implementation of the remedy, S-W may provide written recommendations to DTSC to modify the groundwater monitoring program presented in this document. S-W will implement the changes to the groundwater monitoring program only after approval by DTSC.

7.2.1 Groundwater Monitoring Well Locations

After soil excavation, backfill, and installation of slurry wall breaches/extension, twelve (12) additional groundwater monitoring wells (CDM-101 thru CDM-112) and three piezometers (PZ-101, PZ-102, and PZ-103) will be installed at the Site. Also, a contingent groundwater monitoring well (CDM-113) may be installed (see Section 7.2.2.1). In addition, 27 existing Site monitoring wells will continue to be utilized as part of the groundwater monitoring network. Figure 7-1 provides the tentative locations for these 12 additional groundwater monitoring wells, the contingent monitoring well, and 3 additional piezometers, along with the existing monitoring wells that will remain.

Tables 7-1 and 7-2 provide a summary of construction details and locations for the wells to be included in this monitoring program during and after remedy implementation, respectively. As discussed in Section 5 of the RAP, all other existing wells associated with the Site will be destroyed prior to remedy implementation. Table 5-1 provides a listing of wells that will be destroyed. Proposed additional groundwater monitoring wells on the former Rifkin property will be installed at the same time that the proposed wells on the S-W property are installed, unless the property owner initiates redevelopment on the former Rifkin property that would require a separate installation schedule.

The new groundwater monitoring wells will be similar in construction to the remaining A-zone wells present at the Site. Specifically, they will be 2-inch diameter wells screened across the upper portion of the A-zone, approximately 10 feet in total screen length from an elevation of approximately 8 to -2 feet NAVD88 (North American Vertical Datum of 1988). The new piezometers will be 1 inch in diameter, screened across the upper portion of the A-zone, approximately 10 feet in total screen length from an elevation of approximately 8 to -2 feet NAVD88. For selected monitoring wells, soil boring and grab groundwater investigations in these respective well location areas may be conducted after remedy implementation to confirm the locations and design of the wells prior to their installations.

7.2.1.1 Excavated and Backfilled Area on Former Rifkin Property

Two (2) of the new proposed wells (CDM-101 and CDM-102) will be installed within the excavated and backfilled area on the former Rifkin property, at or near the locations shown on Figure 7-1. CDM-101 and CDM-102 will be installed within low permeability fill.

7.2.1.2 Excavated and Backfilled Area on S-W Property

Two (2) of the new proposed wells (CDM-103 and CDM-104) and the new proposed piezometer (PZ-101) will be installed within the excavated and backfilled area on the S-W property, at or near the locations shown on Figure 7-1. PZ-101 and CDM-103 will be installed within low permeability fill and CDM-104 within high permeability fill.

7.2.1.3 North Side on Former Rifkin Property

Selected existing wells on the former Rifkin property located outside of the excavated and backfilled area will be retained (see Figure 7-1). These existing wells to be retained are: EX-14, EX-15, LF-35, LF-36, LF-37, LF-38, LF-39, LF-40, LF-41, LF-42, MW-1, MW-2, MW-3, RP-1, RP-2, RP-3, RP-4, and RP-5. Six (6) of these existing wells on the former Rifkin property (RP-1, LF-41, LF-36, RP-2, RP-4, and RP-5) will be used as "Rifkin Guard Wells" to verify that additional migration of arsenic and other S-W COCs is not occurring northward across the former Rifkin property.

These wells discussed above are located outside and to the north of the excavated and backfilled area, and will be protected during remedy implementation.

7.2.1.4 North Side on Horton Street

Six existing wells on Horton Street will be retained: LF-12, LF-13, LF-27, LF-28, LF-29, and LF-30 (see Figure 7-1). These wells are located outside and upgradient or cross gradient to the excavated and backfilled area on the SW property and former Rifkin property. Of these wells, LF-12 and LF-28 will be utilized to monitor conditions not affected by the source area.

7.2.1.5 Central Site on S-W Property

Two (2) of the new proposed wells (CDM-105 and CDM-106) will be installed in the central area of the S-W portion of the Site, at or near the locations shown on Figure 7-1. Based on groundwater modeling of conditions after remedy implementation, as presented in Appendix B of the FS (CDM, 2009b), these wells are projected to be downgradient of excavated and backfilled area wells CDM-103 and CDM-104 and upgradient of the slurry wall breaches.

In addition, two (2) of the new proposed wells (CDM-110 and CDM-111) will be installed outside and cross gradient to the excavated and backfilled area on the S-W property, at or near the location shown on Figure 7-1. These proposed wells will be utilized to monitor conditions not affected by the source area.

Two (2) new proposed piezometers will be installed, one near the northeast corner of the S-W property (in the vicinity of existing piezometer LF-PZ-15) and one west of Building 31 (in the vicinity of existing piezometer LF-PZ-11). The piezometers will assist with evaluating the groundwater movement patterns.

7.2.1.6 West Side on S-W Property

Two (2) of the new proposed wells (CDM-107 and CDM-108) will be installed within the downgradient portions of the slurry wall breach locations, at or near the locations shown on Figure 7-1. These two wells will be located within the S-W property.

In addition, one (1) of the new proposed wells (CDM-109) will be installed west, on the downgradient side, of the slurry wall extension, at or near the location shown on Figure 7-1. This proposed well will be located within the S-W property.

7.2.1.7 West Side on Union Pacific Railroad Property

Existing wells LF-24 and LF-25, located on the western, downgradient side of the Union Pacific Railroad property, will be retained (see Figure 7-1). Based on groundwater modeling of conditions after remedy implementation, as presented in the FS (CDM, 2009b), wells LF-24 and LF-25 are projected to be downgradient of wells CDM-107, CDM-108, and CDM-109, and upgradient of the Temescal Creek channel.

7.2.1.8 North Side on S-W Property

Existing well LF-18 on the S-W property will be retained (see Figure 7-1). LF-18 is located outside of the slurry wall system, near the Temescal Creek channel.

7.2.1.9 South Side on Sherwin Avenue

One (1) of the new proposed monitoring wells (CDM-112) will be installed along Sherwin Avenue, at or near the location shown on Figure 7-1. The well will be used to constrain the southern plume extent and assist with evaluating the groundwater movement patterns.

7.2.2 Monitoring Frequency and Sample Analysis

This section presents the monitoring and analysis programs 1) during remedy implementation and 2) for the first four years after remedy implementation.

7.2.2.1 Groundwater Quality Sampling and Analysis

During Remedy Implementation

Table 7-1 provides a summary of the groundwater well monitoring program during remedy implementation.

Dewatering during soil excavation and backfill is expected to temporarily alter groundwater movement paths and, as a result, may draw impacted, upgradient groundwater onto or further onto the former Rifkin property (i.e., drawing groundwater from the east side of Horton Street towards the former Rifkin property). This water movement may also result in the movement of offsite chemical(s) toward

the former Rifkin property. As such, the six Rifkin Guard Wells and well MW-3, which are located closest to apparent source(s) of upgradient, offsite plume(s), will be sampled quarterly during remedy implementation. Results from these samples will be used to assess potential impacts to groundwater on the former Rifkin property from potential spreading of upgradient, offsite plume(s). Any changes in arsenic concentrations for these seven wells that occur during remedy implementation can thus be evaluated.

Groundwater samples from these seven wells will be collected in accordance with methodology for well sampling presented in the existing project Groundwater Monitoring Plan Assessment (LFR, 2006a) and Quality Assurance Project Plan (LFR, 2006b). The samples will be analyzed for arsenic by EPA Method 6010B and VOCs by EPA Method 8260B. In addition, the samples will be measured for the following field parameters during sample collection:

- Temperature
- pH
- Turbidity
- Dissolved Oxygen
- Oxidation-Reduction Potential
- Specific Conductivity

The field parameter results will be used to support the representativeness of the well samples and monitor the relative distribution of oxidizing/reducing conditions.

After Remedy Implementation

Table 7-2 provides a summary of the groundwater well monitoring program after remedy implementation.

With the exception of wells CDM-103, CDM-104, and CDM-112 which will be sampled annually, new monitoring wells installed on the S-W property will be sampled on a semi-annual basis for the first two years after remedy implementation. Following these two years, data from the well samples and the data quality objectives will be used to determine if semi-annual sampling should continue or whether the frequency can be reduced to annual.

If the arsenic concentration for a Rifkin Guard Well or well MW-3 increases above its respective historical maximum detection during remedy implementation, the frequency of groundwater sampling for that well will continue on a quarterly basis after remedy implementation. Quarterly sampling for the well will continue until statistical analysis of the results demonstrates that the arsenic concentration for the well is stable or decreasing; the frequency of sampling for the well will then be

adjusted to semi-annual. Historical maximum arsenic detections for the Rifkin Guard wells and well MW-3 are listed in Table 7-1.

If no increases in arsenic concentrations are observed for these seven wells during remedy implementation, the frequency of groundwater sampling and analysis for arsenic for the Rifkin Guard Wells and all other Site wells for the first four years after remedy implementation will be in accordance with Table 7-2.

If arsenic concentrations in groundwater samples collected from any of the six Rifkin Guard Wells or well MW-3 increase to greater than 500 µg/L during remedy implementation, an additional monitoring well (to be designated CDM-113) would be installed on the former Rifkin property, near former grab groundwater sampling locations RP-BH-012 and CDM-SB1, approximately 120 feet northwest of MW-3 along Horton Street. Well CDM-113 would be similar in construction to the 10 proposed new wells for the Site and would monitor the migration of arsenic in groundwater that could have been pulled onto the former Rifkin property from upgradient, offsite plume(s) during remedy implementation. The frequency of groundwater sampling for CDM-113 would be on a quarterly basis until such time that the data demonstrate that arsenic concentrations are stable or decreasing for CDM-113. The frequency of sampling would then be adjusted to semi-annual.

Groundwater samples will be collected in accordance with the methodology for well sampling presented in the existing project Groundwater Monitoring Plan Assessment (LFR, 2006a) and Quality Assurance Project Plan (LFR, 2006b). The samples will be analyzed for arsenic by EPA Method 6010B and VOCs by EPA Method 8260B. In addition, the samples will be measured for the following field parameters during sample collection:

- Temperature
- pH
- Turbidity
- Dissolved Oxygen
- Specific Conductivity
- Oxidation-Reduction Potential

The field parameter results will be used to support the representativeness of the well samples and monitor the relative distribution of oxidizing/reducing conditions.

7.2.2.2 Depth to Groundwater Measurements

During Remedy Implementation

Table 7-1 provides a summary of the groundwater well monitoring program during remedy implementation.

Dewatering during soil excavation and backfill is anticipated to alter groundwater movement paths and, as a result, may draw upgradient, offsite plume(s) onto or further onto the former Rifkin property. As such, groundwater elevation data will be collected monthly from the six Rifkin Guard Wells and well MW-3. These seven wells are located closest to apparent source(s) of upgradient, offsite plume(s). The monthly data sets will be used to assess potential impacts to groundwater movement conditions on the former Rifkin property regarding potential spreading of upgradient, offsite plume(s) and potential changes in arsenic concentrations for these seven wells.

After Remedy Implementation

Table 7-2 provides a summary of the groundwater well monitoring program for the first four years after remedy implementation.

As the remedy has been designed to control groundwater movement, groundwater elevation data will be collected monthly for the first year from the six Rifkin Guard Wells and well MW-3 to monitor whether groundwater movement patterns are consistent with projected design groundwater model conditions for the remedy, as presented in the FS (CDM, 2009b). The first year's data set will be used to evaluate the effectiveness of the slurry wall segments to divert groundwater, and the effectiveness of the slurry wall breaches to facilitate groundwater movement. After the first year, if groundwater elevations and movement patterns are consistent with projected design conditions, the frequency of groundwater elevation monitoring will be revised to quarterly. The quarterly elevation monitoring data sets will be utilized to continue evaluation of potential seasonal variation in groundwater movement. The frequency of groundwater elevation monitoring will be reevaluated annually.

Should future construction activities affect groundwater movement or rates of infiltration (e.g., redevelopment of the former Rifkin property or S-W property), monthly monitoring will be reinitiated during and post-construction for a period of at least one year to monitor whether groundwater movement patterns continue to be consistent with projected design groundwater model conditions.[1] If groundwater elevations and movement patterns are consistent with projected design conditions, groundwater elevation monitoring will return to its previously established frequency.

Changes to the frequency of groundwater elevation monitoring resulting from a determination that groundwater movement patterns are inconsistent with projected design conditions are further discussed in Section 7.2.5.3.

[1] Based on the type and location of future construction activities, there may be a future need to modify the groundwater monitoring network. As such, S-W may provide written recommendations to DTSC to modify the groundwater monitoring program presented in this document. S-W will implement the changes to the groundwater monitoring program only after approval by DTSC.

7.2.3 Groundwater Quality Effectiveness Criteria

After remedy implementation, samples from the groundwater monitoring wells will be analyzed to evaluate the effectiveness of the remedy. Table 7-3 provides a summary of the groundwater quality effectiveness criteria to be utilized to evaluate the effectiveness of the remedy. The criteria are discussed below.

7.2.3.1 Excavated and Backfilled Area on Former Rifkin Property

It is anticipated that COC concentrations in groundwater within this area will fluctuate after remedy implementation, as the groundwater comes into equilibrium with the backfill material and surrounding groundwater conditions. Samples from wells CDM-101 and CDM-102 will be analyzed to evaluate whether COC concentrations in groundwater in this area are stable or decreasing by no later than four years after remedy implementation. In addition, samples from these wells will be analyzed to evaluate whether arsenic concentrations in this area are less than 5,000 µg/L by no later than four years after remedy implementation.

7.2.3.2 Excavated and Backfilled Area on S-W Property

It is anticipated that COC concentrations in groundwater within this area will fluctuate after remedy implementation, as the groundwater comes into equilibrium with the backfill material and surrounding groundwater conditions. Therefore, samples from wells CDM-103 and CDM-104 will be analyzed to evaluate whether, COC concentrations in groundwater in this area are stable or to decreasing by no later than four years after remedy implementation.

7.2.3.3 North Side on Former Rifkin Property

Samples from the Rifkin Guard Wells will be analyzed to evaluate whether arsenic concentration trends are statistically stable or decreasing after remedy implementation.

7.2.3.4 Central Site on S-W Property

Samples from wells CDM-105 and CDM-106 will be analyzed to determine if there is potential movement of COCs in groundwater toward the west side groundwater monitoring wells CDM-107 and CDM-108.

Samples from wells CDM-110 and CDM-111 will be analyzed to determine if there is potential change in groundwater quality outside of the area affected by the excavated and backfilled area.

7.2.3.5 West Side on S-W Property

Samples from wells CDM-107 and CDM-108 will be analyzed to evaluate whether trends of COC concentrations in groundwater migrating offsite through the slurry wall breaches toward the Union Pacific Railroad property are statistically stable or decreasing, and whether arsenic concentrations exceed 250 µg/L for CDM-107 or 500 µg/L for CDM-108. These arsenic concentration criteria are based on protection of Temescal Creek channel and further discussed in Section 7.3.1.2.

Samples from well CDM-109 will be analyzed to evaluate the effectiveness of the slurry wall extension in containing the onsite groundwater plume and to evaluate whether trends of COC concentrations in groundwater present outside the slurry wall are statistically stable or decreasing.

7.2.3.6 West Side on Union Pacific Railroad Property

Samples from wells LF-24 and LF-25 will be analyzed to evaluate whether COC concentrations in groundwater near the Temescal Creek channel are less than Site cleanup goals or whether their trends are statistically stable or decreasing. Since installation in 1996, arsenic concentrations in samples from these wells have been stable or decreasing. Arsenic concentrations in samples from monitoring well LF-24 since the time of installation in 1996 have been less than 36 µg/L. Arsenic concentrations for LF-25 have been less than 36 µg/L since 2006 and are currently demonstrating a decreasing trend.

7.2.3.7 North Side on S-W Property

Samples from well LF-18 will be analyzed to evaluate whether COC concentrations in groundwater near the Temescal Creek channel are less than Site cleanup goals or whether their trends are statistically stable or decreasing.

7.2.3.8 South Side on Sherwin Avenue

Samples from well CDM-112 will be analyzed to evaluate whether COC concentrations in groundwater in this area are less than Site cleanup goals or whether their trends are statistically stable or decreasing.

7.2.4 Groundwater Movement Effectiveness Criteria

Table 7-3 provides a summary of the groundwater movement criteria to be utilized to monitor the effectiveness of the remedy. The criteria are further discussed below.

7.2.4.1 Groundwater Movement Patterns

Measurements of depths to groundwater in Site wells will be monitored to determine if long-term groundwater movement patterns within the S-W property are consistent with projected design groundwater model conditions for the remedy, as presented in the FS (CDM, 2009b), or as updated during preparation of the RDIP. These conditions include groundwater movement towards the slurry wall breaches and the absence of long-term, localized groundwater mounding.

7.2.4.2 Depths to Groundwater

Groundwater elevation measurements will be evaluated to determine if the depths to groundwater are sufficient to avoid a surface expression of groundwater with a goal of minimizing potential inundation of subsurface utility corridors.

7.2.4.3 Arsenic Mass Flux between CDM-101, CDM-102, CDM-104, and PZ-101

Groundwater elevation measurements, along with concentrations of arsenic in groundwater, from CDM-101, CDM-102, CDM-104, and/or PZ-101 will be evaluated to determine if the net arsenic mass flux within the excavated and backfilled area between the locations of these proposed wells is towards the S-W property west of the former Rifkin property.

As appropriate, the criterion of net mass flux towards the S-W property could be evaluated for other COCs. However, it is not likely to be needed for other COCs as their concentrations for these wells are anticipated to be approximately equal.

7.2.5 Remedy Effectiveness Evaluation

After remedy implementation, the groundwater monitoring data sets will be utilized to evaluate the effectiveness of the remedy and determine if contingency action(s) are needed to achieve Site cleanup goals. The following text summarizes the evaluation process and criteria to be used to determine the need for contingency actions.

7.2.5.1 Groundwater Quality for Wells CDM-101 thru CDM-104, CDM-107 thru CDM-109, CDM-112, LF-18, LF-24, LF-25, and Rifkin Guard Wells

COC concentration trends for these 17 wells will be evaluated by statistical testing, including but not limited to the Mann-Kendall (Gilbert, 1997) nonparametric statistical test. Consistent with U.S. EPA guidance (EPA, 1994), a significance level of 0.05 (i.e., a 95% confidence level) will be used in applying the Mann-Kendall nonparametric test. If an increasing COC concentration trend is found, the frequency of monitoring for the well will be increased to monthly for three months and the 95% UCL concentrations from these four events (the previous scheduled event and subsequent three monthly events) will be used in the Mann-Kendall nonparametric test in place of the previous quarterly event result. If this re-evaluation demonstrates a return to a stable or decreasing COC concentration trend, the frequency of monitoring for the well will return to its previously established frequency listed in Table 7-2. Otherwise, S-W will provide written recommendations to DTSC for implementation of a contingency action (see Section 7.3).

If during establishment of a statistical arsenic concentration trend for wells CDM-107 and CDM-108, arsenic concentrations exceed 250 µg/L for CDM-107 or 500 µg/L for CDM-108, S-W will provide written recommendations to DTSC for implementation of a contingency action (see Section 7.3). These arsenic concentration criteria are based on protection of Temescal Creek channel and further discussed in Section 7.3.1.2.

7.2.5.2 Groundwater Quality for Wells CDM-101 and CDM-102

If four years after remedy implementation the arsenic concentration threshold criterion of 5,000 µg/L is exceeded in samples from either wells CDM-101 or CDM-102, S-W will provide written recommendations to DTSC for implementation of a contingency action (see Section 7.3).

7.2.5.3 Groundwater Movement Patterns

An estimate of groundwater flow direction and hydraulic gradient will be performed following each groundwater elevation monitoring event. The groundwater flow direction and measured hydraulic gradient then will be compared to the projected design groundwater model conditions for the remedy, as presented in the FS (CDM, 2009b), or as updated during preparation of the RDIP. As discussed in Section 7.2.2, the first assessment of this criterion will be conducted after the first year of monthly groundwater elevation monitoring. The groundwater movement conditions that will be monitored as part of the annual assessment will include:

- The slurry wall extension controls groundwater movement to the north and south in the area south of CDM-111;
- Net groundwater movement within the Excavated and Backfilled Area on S-W Property is toward the interceptor trench or the wall breaches near the Union Pacific Railroad property, and not toward Horton Street;
- Net groundwater movement within Excavated and Backfilled Area on Former Rifkin Property is to the north-northwest;
- Net groundwater movement from the high permeability fill area surrounding CDM-104 is toward the slurry wall breaches near the Union Pacific Railroad property, and not toward the former Rifkin property; and
- Mounding of groundwater, to the extent it occurs, is seasonal and generally follows above average precipitation events and does not result in net groundwater movement toward the Rifkin property, movement of water over the top of the slurry wall, or flow around the slurry wall extension.

If the first assessment determines that groundwater movement patterns are consistent with projected design conditions, the frequency of groundwater elevation monitoring will proceed to quarterly as discussed in Section 7.2.2.

If the first assessment or any subsequent annual assessment determines that groundwater movement patterns differ significantly from projected design conditions, S-W will provide written recommendation to DTSC for either implementation of additional monitoring/investigation steps or a contingency action.

Additional monitoring/investigation may include but is not limited to continued/return to monthly groundwater monitoring for an additional year, at

which time a follow up assessment would be made and the monitoring revised as appropriate. Possible contingency action is discussed in Section 7.3.

7.2.5.4 Depths to Groundwater

If one year after remedy implementation the depth to groundwater in any well is measured at or less than four (4) feet bgs, monthly monitoring will be reinitiated for the well to determine if depth to groundwater is exhibiting a rising trend. If the depth to groundwater from three consecutive monthly events is greater than four (4) feet bgs, the frequency of monitoring for the well will return to its previously established frequency. Otherwise, monthly monitoring will continue. If the depth to groundwater in any well is measured at or less than three (3) feet bgs, S-W will provide written recommendations to DTSC for implementation of a contingency action (see Section 7.3).

7.2.5.5 Arsenic Mass Flux between CDM-101, CDM-102, CDM-104, and PZ-101

The projected groundwater model design conditions are intended to prevent long-term (steady-state) groundwater and residual COC movement within the excavated and backfilled area between the locations of these proposed wells towards the former Rifkin property. This additional criterion for monitoring the effectiveness of the remedy includes maintaining a positive mass flux from the former Rifkin property to the S-W property for each COC. As discussed in Section 7.2.4.3, this criterion is anticipated to apply only to arsenic.

After each groundwater elevation monitoring event for the three wells and one piezometer, the hydraulic gradient within the excavated and backfilled area on the former Rifkin property and the contiguous backfilled area to the west, on the S-W property will be calculated. Using the transect method (API, 2003), the arsenic mass flux in groundwater through the cross-sectional area underlying the Rifkin/S-W property line between these wells will be calculated for each event by the following equation:

$$w = (C)(K)(i)(A)(CF)$$

where, w = chemical mass flux through the transect (g/day)
C = concentration of chemical through the transect (mg/L)
K = hydraulic conductivity at the transect (cm/sec)
i = hydraulic gradient at the transect (cm/cm)
A = cross-sectional area associated with the transect (ft^3)
CF = conversion factor, 80.3 (ft/cm)/(sec/day)(L/ft^3)(g/mg)

The calculated mass flux, w, value for each event will include both the magnitude and direction. The direction will be based on assigning a positive hydraulic gradient, i, if groundwater movement is toward Rifkin and negative for movement away from Rifkin. The concentration, C, for each event will be either (1) the concentration of CDM-104 if the groundwater movement is toward Rifkin, or (2) the average of the

arsenic concentration of CDM-101 and CDM-102 if groundwater movement is away from Rifkin.

Due to the uncertainty introduced by variations in percent recovery; quality control; and matrix interferences, there will be inherent variations in the precision and bias of laboratory analytical results for the groundwater samples from the wells used in the flux calculations. Therefore, a default tolerance limit of 20 percent will be used to determine if concentrations are considered different for use in calculating mass flux, i.e., mass flux, w, will be set at zero for each event where arsenic concentrations from wells CDM-101, 102, and CDM-104 differ by or less than 20 percent. As appropriate, this criterion would be applied to other COCs, if concentrations of other COCs for these three wells differ by more than 20 percent.

After the first year of monthly groundwater monitoring, the monthly arsenic mass flux values will be summed to calculate the annual net arsenic mass flux. Each of the monthly mass flux values will represent an approximately equal duration (i.e., one month). If this first year net arsenic mass flux is negative (movement of arsenic away from Rifkin), groundwater monitoring will proceed to quarterly, as discussed in Section 7.2.2.

If the net arsenic mass flux during the first year or any subsequent year is positive (movement of arsenic toward Rifkin), S-W will provide written recommendation to DTSC for either implementation of additional monitoring/investigation steps or a contingency action.

Additional monitoring/investigation may include, but is not limited to, continued/return to monthly groundwater monitoring at these wells for an additional year, at which time a follow up assessment would be made and the monitoring revised as appropriate. Possible contingency action is discussed in Section 7.3.

If the net arsenic mass flux during the first year or any subsequent year exceeds the equivalent to arsenic concentrations of 500 µg/L with a groundwater migration rate of 1 foot/day, S-W will provide written recommendation to DTSC for contingency action (see Section 7.3).

7.3 Contingency Action

Section 7.2.5 presented the criteria for which written recommendations to DTSC for contingency action will be required. The recommendations for contingency action will be consistent with best engineering practices to minimize the potential for any further spread of the COCs and to strive to restore a stable or decreasing groundwater plume. Such contingency action may include, but not be limited to: additional soil excavation and backfill; modifications to permeability of placed fill; in-situ groundwater treatment or in-place geochemistry modifications within the Site or at the slurry wall breaches; modification to the groundwater containment system; and/or active groundwater extraction and treatment.

The submittal to DTSC for the recommended contingency action would also include effectiveness evaluation criteria for the contingency action. S-W would implement the contingency action after approval by DTSC.

7.3.1 Active Groundwater Extraction and Treatment

7.3.1.1 Criteria for Rifkin Guard Wells

If verified arsenic concentrations in samples from any Rifkin Guard Well during evaluation of the contingency action exceed the criteria listed in Table 7-4, S-W will provide written recommendations to DTSC to implement active groundwater extraction and treatment with disposal/reuse of treated water. The objective of the groundwater extraction contingency action, to address exceedance of the Rifkin Guard Well criteria, would be to prevent further migration of arsenic contaminated groundwater onto the former Rifkin property. For this action, further arsenic migration is defined as northerly groundwater movement across the alignment of the Rifkin Guard Wells.

The submittal to DTSC for active groundwater extraction would also include criteria for evaluating the effectiveness of the extraction. Consistent with existing DTSC procedures, S-W would implement active groundwater extraction and evaluate its effectiveness. This evaluation would include consideration of (1) terminating active groundwater extraction and returning to the original remedy (i.e., natural attenuation of arsenic in groundwater) if criteria listed in Table 7-5 are met, or (2) implementation of additional contingency action, if criteria listed in Table 7-5 are not met.

7.3.1.2 Criteria for Wells CDM-107 and CDM-108

If verified arsenic concentrations in samples from CDM-107 or CDM-108 during evaluation of the contingency action exceed the criteria listed in Table 7-4, S-W will provide written recommendations to DTSC to implement active groundwater extraction and treatment with disposal/reuse of treated water. The objective of the groundwater extraction contingency action, to address exceedance of the CDM-107/108 criteria, would be to prevent further migration of arsenic contaminated groundwater through one or both of the slurry wall breaches along the Union Pacific Railroad property, as necessary, to maintain protection of Temescal Creek channel. Supporting information for the contingency action criteria for arsenic listed in Table 7-4 for CDM-107 and CDM-108 is presented in Appendix J.

The submittal to DTSC for active groundwater extraction would also include criteria for evaluating the effectiveness of the extraction. Consistent with existing DTSC procedures, S-W would implement active groundwater extraction and evaluate its effectiveness. This evaluation would include consideration of (1) terminating active groundwater extraction and returning to the original remedy (i.e., natural attenuation of arsenic in groundwater) if criteria listed in Table 7-5 are met, or (2) implementation of additional contingency action if criteria listed in Table 7-5 are not met.

7.3.1.3 Implementation of Active Groundwater Extraction

The objective of the active groundwater extraction contingency action would be to control further migration of arsenic impacted groundwater on the former Rifkin property or through the slurry wall breaches. A contingency action that includes groundwater extraction would be implemented within the area of the higher permeability backfill on the S-W property (as discussed in Section 6). The uniform nature of this higher permeability backfill would facilitate enhanced hydraulic communication with surrounding native materials, backfill in the remainder of the Site, and the interceptor trench.

Using the groundwater model for the Unit A aquifer (A-zone) developed for the FS (CDM, 2009b), a groundwater extraction scenario has been evaluated for conditions anticipated to be present after implementation of the preferred remedy. Based on the groundwater model simulation results, a single groundwater extraction well within the higher permeability backfill on the S-W property would be sufficient to simultaneously meet the objectives of contingency actions for both the former Rifkin property and the slurry wall breaches. Under this selected groundwater extraction scenario, a pumping rate of approximately 3.1 gallons per minute (gpm) from this well would be sufficient to maintain a hydraulic capture zone that extends to the Rifkin Guard Wells and the downgradient slurry wall breach nearest to the source area. The model indicates that of the two downgradient slurry wall breaches along the Union Pacific Railroad property, the one associated with well CDM-108 is the more likely to first have potential increases in COC concentrations that would trigger a need for contingency action.

The groundwater model simulation results include a presentation of the steady-state potentiometric surface contours and particle tracking showing groundwater movement in the A-zone that would develop due to pumping from this single groundwater extraction well within the high permeability backfill on the S-W property. The results demonstrate that this contingency groundwater extraction action would adequately provide control of migration of COCs in groundwater. Details of the groundwater model evaluation and simulation results are included in Appendix K.

7.4 Reporting

Results from post-remediation activities will be provided to DTSC on a quarterly basis for the first four years, at which time an evaluation will be made as to appropriate reporting frequency. These reports will include summaries of OM&M events and results of the groundwater monitoring program. The reports will detail deviations from this OM&M and groundwater monitoring plans, if any, provide an explanation for the deviations and recommendations for future actions or changes to monitoring protocols. If at anytime, data or other information indicates that there is an immediate issue or impact to human health or environment, this data or information will be reported immediately to DTSC.

Table 7-1
Well Construction Details and Monitoring Program During Remedy Implementation
Sherwin-Williams Emeryville Remedial Action Plan

Well Number	Well Construction Details										*Well Monitoring Program During Excavation/Backfill*				*Maximum Arsenic Concentration Detected from Well (ug/L) thru April 2008* [2]
	Date Constructed	*Top of Casing Elevation* (feet NAVD88)	*Total Depth* (feet bgs)	*Casing Material*	*Casing Diameter* (inches)	*Screen Slot Size* (inches)	*Screen Interval Depths* Top (feet toc)	Bottom (feet toc)	*Screen Interval Elevations* Top (feet NAVD88)	Bottom (feet NAVD88)	*Depth To Groundwater*	*Arsenic by EPA Method 6010B*	*Volatile Organic Compounds by EPA Method 8260B*	*Field Parameters* [1]	
Existing Wells															
Former Rifkin Property															
RP-1	7/26/1994	17.84	13	PVC	2	0.010	7.0	12.0	10.8	5.8	Monthly	Quarterly	Quarterly	Each Event	95
RP-2	7/25/1994	17.94	15	PVC	2	0.010	8.5	14.5	9.4	3.4	Monthly	Quarterly	Quarterly	Each Event	37
RP-4	7/25/1994	17.83	17	PVC	2	0.010	7.0	17.0	10.8	0.8	Monthly	Quarterly	Quarterly	Each Event	15
RP-5	7/25/1994	17.74	15	PVC	2	0.010	7.0	15.0	10.7	2.7	Monthly	Quarterly	Quarterly	Each Event	11
LF-36	1/3/2000	18.87	16	PVC	2	0.020	7.0	16.0	11.9	2.9	Monthly	Quarterly	Quarterly	Each Event	65
LF-41	12/29/1999	18.24	15	PVC	2	0.020	7.0	15.0	11.2	3.2	Monthly	Quarterly	Quarterly	Each Event	97
MW-3	12/8/1994	17.30	19.5	PVC	2	0.010	6.5	19.5	10.8	-2.2	Monthly	Quarterly	Quarterly	Each Event	120

Notes:
NADV88: North American Vertical Datum of 1988
bgs: below ground surface
toc: top of casing
PVC: polyvinyl chloride
ug/L: microgram per liter
1 - Field parameters include: temperature, pH, turbidity, dissolved oxygen, and oxidation-reduction potential.
2 - LFR Inc. 2008. Combined Groundwater and NPDES Self-Monitoring Report, Sherwin-Williams Facility, 1450 Sherwin Avenue, Emeryville, California. July 30.

Table 7-2
Well Construction Details and Monitoring Program After Remedy Implementation
Sherwin-Williams Emeryville Remedial Action Plan

Well Number	Well Construction Details										*Well Monitoring Program After Excavation/Backfill* [1]			
	Date Constructed	*Top of Casing Elevation* (feet NAVD88)	*Total Depth* (feet bgs)	*Casing Material*	*Casing Diameter* (inches)	*Screen Slot Size* (inches)	*Screen Interval Depths* Top (feet toc)	*Screen Interval Depths* Bottom (feet toc)	*Screen Interval Elevations* Top (feet NAVD88)	*Screen Interval Elevations* Bottom (feet NAVD88)	*Depth To Groundwater* [2]	*Arsenic by EPA Method 6010B*	*Volatile Organic Compounds by EPA Method 8260B*	*Field Parameters* [3]
Existing Wells														
Horton Street														
LF-12	11/2/1989	17.65	18	PVC	4	0.020	7.5	17.5	10.2	0.1	Monthly/Quarterly	Annually	Annually	Each Event
LF-13	11/2/1989	17.48	18	PVC	4	0.020	7.0	17.0	10.5	0.5	Well retained for possible future monitoring, if needed			
LF-27	12/22/1997	17.83	18	PVC	2	0.010	10.0	18.0	7.8	-0.2	Well retained for possible future monitoring, if needed			
LF-28	12/22/1997	17.09	18	PVC	2	0.010	6.5	18.0	10.6	-0.9	Monthly/Quarterly	Annually	Annually	Each Event
LF-29	12/23/1997	16.40	20	PVC	2	0.010	6.0	19.0	10.4	-2.6	Well retained for possible future monitoring, if needed			
LF-30	12/23/1997	15.86	19	PVC	2	0.010	6.0	18.5	9.9	-2.6	Well retained for possible future monitoring, if needed			
Former Rifkin Property														
RP-1[a]	7/26/1994	17.84	13	PVC	2	0.010	7.0	12.0	10.8	5.8	Monthly/Quarterly	Quarterly/Semi-Annually [4]	Annually	Each Event
RP-2[a]	7/25/1994	17.94	15	PVC	2	0.010	8.5	14.5	9.4	3.4	Monthly/Quarterly	Quarterly/Semi-Annually [4]	Annually	Each Event
RP-3	7/26/1994	17.87	13	PVC	2	0.010	8.0	12.5	9.9	5.4	Monthly/Quarterly	Semi-Annually	Annually	Each Event
RP-4[a]	7/25/1994	17.83	17	PVC	2	0.010	7.0	17.0	10.8	0.8	Monthly/Quarterly	Quarterly/Semi-Annually [4]	Annually	Each Event
RP-5[a]	7/25/1994	17.74	15	PVC	2	0.010	7.0	15.0	10.7	2.7	Monthly/Quarterly	Quarterly/Semi-Annually [4]	Annually	Each Event
LF-35	9/21/199	18.93	27	PVC	2	0.010	24.0	27.0	-5.1	-8.1	Monthly/Quarterly	Annually	Annually	Each Event
LF-36[a]	1/3/2000	18.87	16	PVC	2	0.020	7.0	16.0	11.9	2.9	Monthly/Quarterly	Quarterly/Semi-Annually [4]	Annually	Each Event
LF-37	1/4/2000	18.54	16	PVC	2	0.020	7.0	16.0	11.5	2.5	Monthly/Quarterly	Semi-Annually	Annually	Each Event
LF-38	1/4/2000	18.51	27	PVC	2	0.020	20.0	27.0	-1.5	-8.5	Monthly/Quarterly	Annually	Annually	Each Event
LF-39	1/3/2000	18.97	26	PVC	2	0.020	18.0	26.0	1.0	-7.0	Monthly/Quarterly	Annually	Annually	Each Event
LF-40	1/4/2000	18.84	15	PVC	2	0.020	7.0	15.0	11.8	3.8	Monthly/Quarterly	Semi-Annually	Annually	Each Event
LF-41[a]	12/29/1999	18.24	15	PVC	2	0.020	7.0	15.0	11.2	3.2	Monthly/Quarterly	Quarterly/Semi-Annually [4]	Annually	Each Event
LF-42	1/5/2000	17.29	16	PVC	2	0.020	7.0	15.0	10.3	2.3	Monthly/Quarterly	Semi-Annually	Annually	Each Event
EX-14	12/29/1999	18.74	16	SS	6	0.010	5.5	15.5	13.2	3.2	Well retained for possible future monitoring, if needed			
EX-15	12/29/1999	17.88	17	SS	6	0.010	7.0	17.0	10.9	0.9	Well retained for possible future monitoring, if needed			
MW-1	12/9/1994	16.48	19	PVC	2	0.010	7.0	17.0	9.5	-0.5	Well retained for possible future monitoring, if needed			
MW-2	12/8/1994	16.29	19	PVC	2	0.010	5.0	17.0	11.3	-0.7	Well retained for possible future monitoring, if needed			
MW-3	12/8/1994	17.30	20	PVC	2	0.010	6.5	19.5	10.8	-2.2	Monthly/Quarterly	Quarterly/Semi-Annually [4]	Annually	Each Event
Sherwin-Williams Property														
LF-18	2/5/1996	15.75	19	PVC	2	0.010	8.0	18.0	7.8	-2.3	Monthly/Quarterly	Annually	Annually	Each Event
Union Pacific Railroad Property														
LF-24	4/4/1996	12.92	17	PVC	2	0.010	7.0	17.0	5.9	-4.1	Monthly/Quarterly	Annually	Annually	Each Event
LF-25	4/4/1996	14.01	18	PVC	2	0.010	8.0	18.0	6.0	-4.0	Monthly/Quarterly	Annually	Annually	Each Event

Table 7-2
Well Construction Details and Monitoring Program After Remedy Implementation
Sherwin-Williams Emeryville Remedial Action Plan

Well Number	**Well Construction Details**										***Well Monitoring Program After Excavation/Backfill*** [1]			
	Date Constructed	***Top of Casing Elevation*** (feet NAVD88)	***Total Depth*** (feet bgs)	***Casing Material***	***Casing Diameter*** (inches)	***Screen Slot Size*** (inches)	***Screen Interval Depths*** Top (feet toc)	Bottom (feet toc)	***Screen Interval Elevations*** Top (feet NAVD88)	Bottom (feet NAVD88)	***Depth To Groundwater*** [2]	***Arsenic by EPA Method 6010B***	***Volatile Organic Compounds by EPA Method 8260B***	***Field Parameters*** [3]
Proposed Wells [5]														
Former Rifkin Property														
CDM-101	--	--	--	PVC	2	0.010	--	--	8	-2	Monthly/Quarterly	Semi-Annually	Semi-Annually	Each Event
CDM-102	--	--	--	PVC	2	0.010	--	--	8	-2	Monthly/Quarterly	Semi-Annually	Semi-Annually	Each Event
Sherwin-Williams Property														
CDM-103	--	--	--	PVC	2	0.010	--	--	8	-2	Monthly/Quarterly	Annually	Annually	Each Event
CDM-104	--	--	--	PVC	2	0.010	--	--	8	-2	Monthly/Quarterly	Annually	Annually	Each Event
CDM-105	--	--	--	PVC	2	0.010	--	--	8	-2	Monthly/Quarterly	Semi-Annually/Annually [6]	Annually	Each Event
CDM-106	--	--	--	PVC	2	0.010	--	--	8	-2	Monthly/Quarterly	Semi-Annually/Annually [6]	Annually	Each Event
CDM-107	--	--	--	PVC	2	0.010	--	--	8	-2	Monthly/Quarterly	Semi-Annually	Semi-Annually	Each Event
CDM-108	--	--	--	PVC	2	0.010	--	--	8	-2	Monthly/Quarterly	Semi-Annually	Semi-Annually	Each Event
CDM-109	--	--	--	PVC	2	0.010	--	--	8	-2	Monthly/Quarterly	Semi-Annually/Annually [6]	Annually	Each Event
CDM-110	--	--	--	PVC	2	0.010	--	--	8	-2	Monthly/Quarterly	Semi-Annually/Annually [6]	Annually	Each Event
CDM-111	--	--	--	PVC	2	0.010	--	--	8	-2	Monthly/Quarterly	Semi-Annually/Annually [6]	Annually	Each Event
CDM-112	--	--	--	PVC	2	0.010	--	--	8	-2	Monthly/Quarterly	Annually	Annually	Each Event
Proposed Piezometers														
Sherwin-Williams Property														
PZ-101	--	--	--	PVC	1	0.010	--	--	8	-2	Monthly/Quarterly	--	--	--
PZ-102	--	--	--	PVC	1	0.010	--	--	8	-2	Monthly/Quarterly	--	--	--
PZ-103	--	--	--	PVC	1	0.010	--	--	8	-2	Monthly/Quarterly	--	--	--

Notes:

NADV88: North American Vertical Datum of 1988

bgs: below ground surface

toc: top of casing

PVC: polyvinyl chloride

SS: stainless steel

a - Designated Rifkin Guard Well.

1 - Monitoring program is only for the first four years after remedy implementation.

2 - Depth to groundwater measured monthly for first year and then quarterly for next three years; should there be a change in the rate of infiltration that affects groundwater flow conditions, monthly monitoring would be reinitiated for at least one year.

3 - Field parameters include: temperature, pH, turbidity, dissolved oxygen, oxidation-reduction potential, and specific conductivity.

4 - Frequency of monitoring for arsenic for this well will be quarterly if arsenic concentrations for this well increases above its historical maximum detection during remedy implementation; otherwise, the frequency will be semi-annually.

5 - In addition to the 12 proposed wells presented in this table, a thirteenth contingent well (CDM-113) will be installed if arsenic concentrations from any of the Rifkin Guard Wells or MW-3 increase to above 500 micrograms per liter (ug/L) during remedy implementation; CDM-113 would be installed in the vicinity of soil boring locations CDM-SB1 and RP-BH-012, approximately 120 feet northwest of MW-3 along Horton Street. If installed, the well would be monitored and sampled similar to LF-36.

6 - Frequency of monitoring for arsenic for this well will be semi-annually for the first two years; if after two years arsenic concentration is stable to decreasing, frequency of monitoring will be modified to annually; otherwise, it will remain semi-annually.

Table 7-3
Remedy Effectiveness Evaluation Criteria
Sherwin-Williams Emeryville Remedial Action Plan

Groundwater Quality Effectiveness Criteria [1]	
Well	**Remedy Effectiveness Evaluation Criteria**
Former Rifkin Property	
CDM-101	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing four years after remedy implementation, and arsenic is less than 5,000 ug/L four years after remedy implementation
CDM-102	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing four years after remedy implementation, and arsenic is less than 5,000 ug/L four years after remedy implementation
RP-1[a]	Arsenic concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
RP-2[a]	Arsenic concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
RP-4[a]	Arsenic concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
RP-5[a]	Arsenic concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
LF-36[a]	Arsenic concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
LF-41[a]	Arsenic concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
Sherwin-Williams Property	
LF-18	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
CDM-103	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
CDM-104	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
CDM-107	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
CDM-108	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
CDM-109	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
CDM-112	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
Union Pacific Property	
LF-24	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing
LF-25	COC concentrations are less than Site cleanup goals or their trends are statistically stable to decreasing

Groundwater Movement Effectiveness Criteria
1. Long-term groundwater flow patterns are consistent with projected design groundwater model conditions.
2. Long-term arsenic in groundwater mass flux at the Rifkin/S-W property line between CDM-101/CDM-102 and PZ-101/CDM-104 is westward, from the former Rifkin property to the S-W property.
3. Absence of long-term groundwater mounding at the Site.
4. Depths to groundwater at all wells are more than 3 feet below ground surface.

Notes:

COC: chemical of concern

ug/L: microgram per liter

a - Designated Rifkin Guard Well.

1 - Wells not presented do not have groundwater quality remedy effectiveness evaluation criteria. In addition to the wells indentified on the former Rifkin property, contingent well CDM-113 (see Table 7-2), if installed, would be monitored and evaluated for remedy effectiveness, similar to LF-36.

Table 7-4
Criteria for Implementing Active Groundwater Extraction
Sherwin-Williams Emeryville Remedial Action Plan

Well	Criteria for Implementing Active Groundwater Extraction [1]
Former Rifkin Property (Guard) Wells	
RP-1[a]	Increasing arsenic concentration trend with concentration greater than higher of 150 ug/L or 150% of the maximum arsenic concentration detected for the well prior to or during remedy implementation
RP-2[a]	Increasing arsenic concentration trend with concentration greater than higher of 75 ug/L or 150% of the maximum arsenic concentration detected for the well prior to or during remedy implementation
RP-4[a]	Increasing arsenic concentration trend with concentration greater than higher of 75 ug/L or 150% of the maximum arsenic concentration detected for the well prior to or during remedy implementation
RP-5[a]	Increasing arsenic concentration trend with concentration greater than higher of 75 ug/L or 150% of the maximum arsenic concentration detected for the well prior to or during remedy implementation
LF-36[a]	Increasing arsenic concentration trend with concentration greater than higher of 75 ug/L or 150% of the maximum arsenic concentration detected for the well prior to or during remedy implementation
LF-41[a]	Increasing arsenic concentration trend with concentration greater than higher of 150 ug/L or 150% of the maximum arsenic concentration detected for the well prior to or during remedy implementation
Sherwin-Williams Property Wells	
CDM-107	Increasing arsenic concentration trend with concentration greater than 250 ug/L
CDM-108	Increasing arsenic concentration trend with concentration greater than 500 ug/L

Notes:

COC: chemical of concern

ug/L: microgram per liter

a - Designated Rifkin Guard Well.

1 - Wells not presented do not have criteria for implementing active groundwater extraction.

Table 7-5
Criteria to Terminate Active Groundwater Extraction
Sherwin-Williams Emeryville Remedial Action Plan

Well	*Criteria to Terminate Active Groundwater Extraction and Return to Monitored Natural Attenuation* [1]	*Maximum Arsenic Concentration Detected from Well thru April 2008* [2]
Former Rifkin Property		
RP-1[a]	Arsenic concentration less than higher of 100 ug/L or maximum arsenic concentration detected prior to or during remedy implementation	95
RP-2[a]	Arsenic concentration less than higher of 50 ug/L or maximum arsenic concentration detected prior to or during remedy implementation	37
RP-4[a]	Arsenic concentration less than higher of 50 ug/L or maximum arsenic concentration detected prior to or during remedy implementation	15
RP-5[a]	Arsenic concentration less than higher of 50 ug/L or maximum arsenic concentration detected prior to or during remedy implementation	11
LF-36[a]	Arsenic concentration less than higher of 65 ug/L or maximum arsenic concentration detected prior to or during remedy implementation	65
LF-41[a]	Arsenic concentration less than higher of 100 ug/L or maximum arsenic concentration detected prior to or during remedy implementation	97
Sherwin-Williams Property		
CDM-107	Arsenic concentration less than 250 ug/L	Not applicable [3]
CDM-108	Arsenic concentration less than 500 ug/L	Not applicable [3]

Notes:

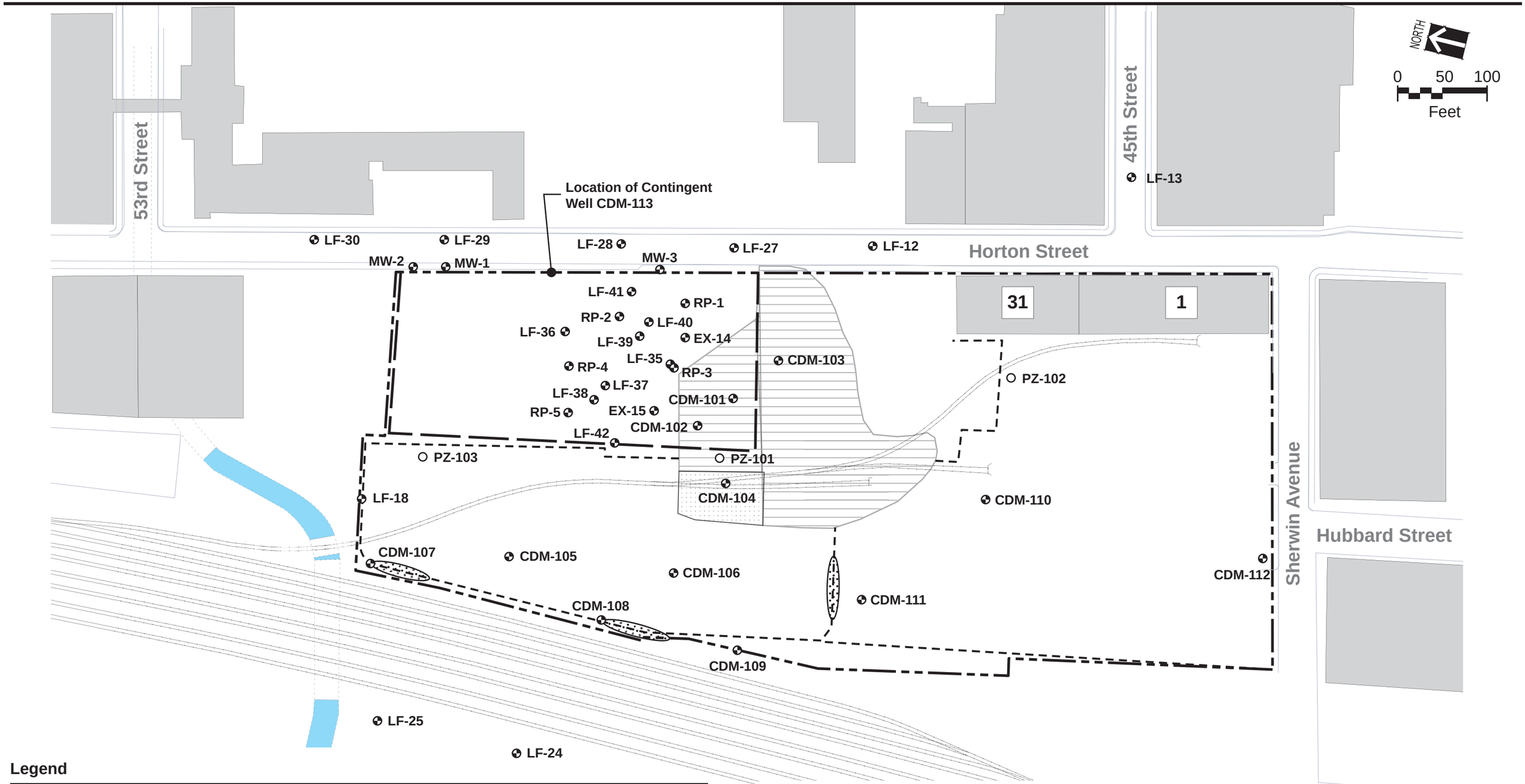
ug/L: microgram per liter

a - Designated Rifkin Guard Well.

1 - Wells not presented do not have criteria to terminate active groundwater extraction and return to monitored natural attenuation.

2 - LFR Inc. 2008. Combined Groundwater and NPDES Self-Monitoring Report, Sherwin-Williams Facility, 1450 Sherwin Avenue, Emeryville, California. July 30.

3 - CDM-107 and CDM-108 to be installed during remedy implementation.



Legend

- Site Boundary
- Slurry Wall
- Post Remedy Implementation Monitoring Well
- Post Remedy Implementation Piezometer
- Slurry Wall Breach
- Saturated Soil Excavation and Low Permeability Backfill
- Saturated Soil Excavation and High Permeability Backfill

Notes:

1. New wells CDM-101 through CDM-112 and piezometers PZ-101 through PZ-103 will be installed at end of implementation activities. All other wells shown are existing and will be protected during implementation activities.
2. Existing site wells not shown will be destroyed before or with implementation activities.

W:\REPORTS\Sherwin-Williams\Emeryville\Remedial Action Plan\Graphics\Monitoring Locations (Fig7-1).ai 05/11/10 JJT

CDM

Figure 7-1

Preliminary Post Remedy Implementation Groundwater Monitoring Locations

Sherwin-Williams Company - Emeryville, California

Section 8
References

Bostick et al., 2004. Arsenite retention mechanisms within estuarine sediments of Pescadero, CA. Environ. Sci. Technol. v. 38 p. 3299-3304. Bostick, B. C., Chen, C. and S. Fendorf.

Cal/EPA, 2009. Letter providing conditional approval of the April 1, 2009 Feasibility Study and April 10, 2009 Report for Public Health Evaluation of the Remedial Alternative. California Environmental Protection Agency, Department of Toxic Substances Control. May 7, 2009.

Cal/EPA, 2007. Letter providing conditional approval of the November 8, 2006 Feasibility Study Work Plan. California Environmental Protection Agency, Department of Toxic Substances Control. January 16, 2007.

Cal/EPA, 2006a. Letter providing conditional approval of the November 22, 2006 Treatability Study Work Plan and December 8, 2006 Addendum to Treatability Study Work Plan. California Environmental Protection Agency, Department of Toxic Substances Control. December 13, 2006.

Cal/EPA, 2006b. Imminent and Substantial Endangerment Determination and Order and Remedial Action Order. Docket No. IS/E 05/06-007. California Environmental Protection Agency, Department of Toxic Substances Control. May 10, 2006.

Cal/EPA, 2005. Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment. January 2005.

CDM, 2009a. Report for Public Health Evaluation of the Remedial Alternative, Sherwin-Williams Company, Emeryville, California. April 10, 2009.

CDM, 2009b. Feasibility Study, Sherwin-Williams Company, Emeryville, California. April 1, 2009.

CDM, 2008a. Soil Mixing Overview, Phase II Bench Scale Testing, In Situ Soil Treatment Treatability Study, Sherwin-Williams Company, Emeryville, California. February 22, 2008.

CDM, 2008b. Report of Findings, Soil Characterization Study Addendum, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. February 22, 2008.

CDM, 2008c. Report of Findings, Phase III Groundwater Treatability Study, Groundwater Column Studies, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. February 6, 2008.

CDM, 2007a. Report of Findings, Phase II Groundwater Treatability Study, Groundwater Column Studies, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. October 15, 2007.

CDM, 2007b. Phase III Pilot Scale Testing, In Situ Soil Treatment Study, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. September 24, 2007.

CDM, 2007c. Addendum to Treatability Study Work Plan for Additional Arsenic Speciation and Characterization Study – Additional Sample Collection and Characterization, The Sherwin-Williams Company, Emeryville, CA. Camp Dresser & McKee Inc., on behalf of The Sherwin-Williams Company. June 28, 2007.

CDM, 2007d. Report of Findings, Soil Characterization Study, The Sherwin-Williams Company, Emeryville, CA. Camp Dresser & McKee Inc., on behalf of The Sherwin-Williams Company. June 28, 2007.

CDM, 2007e. Phase II Groundwater Treatability Study Work Plan Addendum, Emeryville, California. Camp Dresser & McKee Inc., on behalf of The Sherwin-Williams Company. June 28, 2007.

CDM, 2007f. Phase I Groundwater Treatability Study Report for Laboratory Screening Studies, Emeryville, California. Camp Dresser & McKee Inc., on behalf of The Sherwin-Williams Company. June 21, 2007.

CDM, 2007g. Stage II Procedure and Findings, Phase II Bench Scale Testing, In Situ Soil Treatment Study, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. June 15, 2007.

CDM, 2007h. Data Summary Report for Soil Gas Investigation Activities, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. January 30, 2007.

CDM, 2007i. Data Summary Report for Installation and Sampling of Well CDM-1, Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California. January 30, 2007.

CDM, 2006a. Addendum to Treatability Study Work Plan, The Sherwin-Williams Company, Emeryville, CA. Camp Dresser & McKee Inc., on behalf of The Sherwin-Williams Company. December 8, 2006.

CDM, 2006b. Treatability Study Work Plan for Laboratory Screening Studies, The Sherwin-Williams Company, Emeryville, CA. Camp Dresser & McKee Inc., on behalf of The Sherwin-Williams Company. November 22, 2006.

CDM, 2006c. Feasibility Study Work Plan, the Sherwin Williams Company, Emeryville, CA. Camp Dresser & McKee Inc., on behalf of The Sherwin-Williams Company. November 8, 2006.

CDM, 2006d. Interim Remedial Measures Evaluation Report, The Sherwin-Williams Company, 1450 Sherwin Avenue, Emeryville, CA. Camp Dresser & McKee Inc. July 14, 2006.

CDM, 2005. Report of Findings, December 2004 Subsurface Investigation, 1450 Sherwin Avenue, Emeryville, California. Camp Dresser & McKee Inc. March 2005.

CDM, 2003. Arsenic Stabilization and Distribution Treatability Study. Camp Dresser & McKee Inc. January 3, 2003.

CDM, 2002. Report of Findings, Subsurface Investigation, Former Rifkin Property, Emeryville, California. Camp Dresser & McKee Inc. December 2002.

EarthRisk, 2002. Current Conditions Risk Screen, Sherwin-Williams Emeryville Plant. EarthRisk, Inc. and ENTRIX. May 13, 2002.

EKI, 2008. Final Feasibility Study and Remedial Action Plan, Site B Project Area, Emeryville, California. March 2008.

EKI, 1999. Final Remedial Action Plan, Elementis, McKinley, Sepulveda, and Old Shellmound Street Properties, Emeryville, California. May 1999.

ENTRIX, 2002. Remedial Investigation, Sherwin-Williams Site, Emeryville, California. ENTRIX. March 8, 2002.

Freeze and Cherry, 1979. Groundwater, Freeze, A. and J. Cherry, Prentice-Hall, Englewood Cliffs, N.J.

Gradient, 2005. Human Health Risk Assessment for 1450 Sherwin Avenue, Emeryville, California. Gradient Corporation. February 11, 2005.

Langmuir et al., 1985. Chemical equilibrium and kinetics of geochemical processes in ground water studies. In Practical Applications of Ground Water Geochemistry (ed. B. Hitchon and E.I. Wallick). Proceedings of the First Canadian/American Conference on Hydrogeology. National Water Well Association. Worthington, Ohio. Langmuir, D.L. and J. Mahoney. 1985.

LBNL, 2002. Analysis of Background Distributions of Metals in the Soil at Lawrence Berkeley National Laboratory. Lawrence Berkeley National Laboratory, University of California (Berkeley). June 2002.

LBNL, 1995. Protocol for Determining Background Concentrations of Metals in Soils at Lawrence Berkeley National Laboratory. Lawrence Berkeley National Laboratory, University of California (Berkeley). August 1995.

LFR, 2008. Groundwater Monitoring Report, July 1 through December, 2007, The Sherwin-Williams Company, 1450 Sherwin Avenue, Emeryville, CA. LFR Inc. January 30, 2008.

LFR, 1998. Evaluation of Interim Remedial Measures and Workplan for Implementation of Future Interim Remedial Measures (Draft Final), The Sherwin-Williams Facility, 1450 Sherwin Avenue, Emeryville, California. Levine-Fricke Recon. May 20, 1998.

Metcalf & Eddy, 1979. Wastewater Engineering: Treatment Disposal Reuse, Second Edition, McGraw-Hill. 1979.

Norfleet Consultants, 1998. Groundwater Study and Water Supply History of the East Bay Plain, Alameda & Contra Costa Counties, CA prepared for: The Friends of the San Francisco Estuary.

O'Day, et al., 2004. The Influence of Sulfur and Iron on Dissolved Arsenic Concentrations in Shallow Subsurface Under Changing Redox Conditions, National Academy of Sciences, PNAS, Vol. 101, No. 38. pp. 13703 to 13708. O'Day, P.A., Vlassopolous, D., Root, R. and Rivera, N. September 21, 2004.

Pierce and Moore. 1982. Adsorption of Arsenite and Arsenate on Amorphous Iron Hydroxide. Water Resource. V. 16 pp 1247-1253.

Portland Cement Association, 1991. Solidification And Stabilization of Wastes Using Portland Cement, W. Adaska, S. Tresouthick, and P. West.

PQ Quartz Corporation, 1999. Treatability Study Manual: Solidification/Stabilization, M. Kovacs.

USEPA, 2007 Monitored Natural Attenuation of Inorganic Contaminants in Ground Water, Volumes I and II. EPA/600/R07/139. United States Environmental Protection Agency. October 2007.

USEPA, 2006. Guidance on Systematic Planning using the Data Quality Objectives Process. United States Environmental Protection Agency. February 2006.

USEPA, 2002. Arsenic Treatment Technologies for Soil, Waste, and Water. Office of Solid Waste and Emergency Response. EPA-542-R-02-004. United States Environmental Protection Agency. September 2000.

USEPA, 2000. A Guide to Developing and Documenting Cost Estimates During the Feasibility Study. United States Environmental Protection Agency. July 2000.

USEPA, 1999. Presumptive Remedies: Policies and Procedures, OSWER 9355.0-47FS. United States Environmental Protection Agency. September 1999.

USEPA, 1997. USEPA Region IX Sampling and Analysis Plan Guidance. United States Environmental Protection Agency, Region IX. April 1997.

USEPA, 1994. Statistical Training Course for Ground-water Monitoring Data Analysis. EPA530-R-003. United States Environmental Protection Agency, Office of Solid Waste and Emergency Response. April 1994.

USEPA, 1990. Preamble to CFR Part 300 National Oil and Hazardous Substances Pollution Contingency. United States Environmental Protection Agency. April 9, 1990.

USEPA, 1991. Risk Assessment Guidance for Superfund: Volume 1, Human Health Evaluation Manual (Part B: Development of Risk-Based Remediation Goals), Office of Emergency and Remedial Response. Publication 9285.7-01B. States Environmental Protection Agency. December 1991.

USEPA, 1988. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA. United States Environmental Protection Agency. October 1988.

Water Board, 2002. Water Board Approval of RI report. 2002.

Water Board, 1998. Order No. 98-009, Adoption of Site Cleanup Requirements and Rescission of Cleanup and Abatement Order No. 97-047 for: The Sherwin-Williams Company, 1450 Sherwin Avenue, Emeryville, Alameda County.

Water Board, 1995. Water Quality Control Plan, San Francisco Bay Basin (Region 2). California Regional Water Quality Control Board, San Francisco Bay Region. June 21, 1995.

Wilkin et al., 2003. Speciation of Arsenic in Sulfidic Waters, Geochem Trans. Wilkin, R.T., Wallschlager, D., Ford, R.G. March 18, 2003.

Wilkin et al., 2002. Use of hydrochloric acid for determining solid-phase arsenic partitioning in sulfidic sediments. Environ. Sci. Technol. v 36 p. 4921-4927. Wilkin, R.T. and R. G. Ford.

EMERYVILLE SITE STATUS

June 1, 2015

___ = project completed ___ = project inactive

1. **UPRR Parcel D**
   - City oversight under the MOU, consultant is Erler & Kalinowki (EKI)
   - Status: draft NFA submitted to DTSC and Water Board
   - DTSC stated that it can't concur if concentrations remaining above residential levels without a deed restriction. DTSC has not yet reviewed the draft NFA. No comments from Water Board.
   - Preliminary draft deed restriction submitted to M. Biddle on 11/30/09, and to M. Niebanck on 10/27/10.

2. **Horton Landing Park**
   - City oversight under the MOU and cleanup grant; consultant is EKI
   - Status: the final Responsiveness Summary was sent to M. Niebanck on August 10, 2010.
   - Next Steps: Implement site cleanup; prepare completion report and Conditional No Further Action.

3. **Greenway at 59th Street, HSP Properties**
   - City oversight under the MOU cleanup by HSP under Polanco; HSP consultant is Sequoia Environmental & Engineering Corporation (Sequoia).
   - Status: K. Toth of DTSC concurred with the City's Conditional NFA via letter dated March 18, 2013.
   - Next Steps: project completed.

4. **64th and Christie Proposed Residential Building**
   - City oversight under the MOU
   - TMG = owner, PES = consultant
   - Status: DTSC concurred with the City's conditional approval on 12/29/10. On 6/14/12, Will Mast of PES called to discuss changes to the collection of confirmation samples on the two sides of the property where excavation would extend to the property boundary, i.e., no samples would be collected. Because the requested changes were extensive, Will stated he would prepare a written request to be sent to DTSC for comment/concurrence. On 10/24/12, Will Mast called to say that remediation is beginning. I reminded him of the changes he requested and that he was going to prepare a written request. He said he will submit it in a few days. Nothing was received. Emailed a reminder on 11/26/2012 that all samples must be collected unless we receive approval from DTSC for fewer samples. No reply was received. Emailed W. Mast asking about the status of the project on 6/28/2013, but no reply was received.
   - In April 2015, the City was contacted that the remediation was completed. A meeting was held with the City, TMG, and PES to discuss remediation on 4/16/15. A draft Remediation Implementation Report was received on 5/1/15; comments were provided on 5/6/15. A revised Remediation Implementation Report was received on 5/18/15; comments were provided on 5/20/15. K. Toth of DTSC was contacted on 5/18/15 regarding the pending Remediation Implementation Report to be submitted.
   - Next Steps: Submit draft Remediation Implementation Report to K. Toth, incorporate her comments, and prepare the Conditional No Further Action for her concurrence.

5. **48th Street Community Garden**
   - Cleanup grant; consultant = Weiss
   - Status: K. Toth of DTSC concurred with the City's Conditional NFA via email dated March 5, 2013.

- Next Steps: project completed.

6. **3706 San Pablo Ave and 1025 West MacArthur**
   - Cleanup grant; consultant = Weiss
   - Status: Revised Draft Site Cleanup Plan (SCP) was submitted to the Agencies on 8/5/2014. Received comments from DTSC via email on 8/6/2014, and discussed comments from M. Johnson over the telephone on 8/26/14. Submitted the Conditional Approval to the Mark Johnson of the Water Board on 8/28/14; received concurrence from the Water Board on 8/29/14. Working with the Water Board regarding DTSC comment about long-term groundwater monitoring; a deed restriction under Water Board oversight will be recorded as part of the remediation to prevent future use of groundwater beneath the site. A public meeting was held on 9/24/14, and the SCP was finalized on 11/14/14.
   - Next Steps: Implement remediation, prepare the completion report, and prepare the Conditional No Further Action for Water Board Concurrence.

7. **5701 Hollis Street Greenway**
   - City oversight under the MOU; City-owned property; consultant is Ninyo&Moore (N&M).
   - Status: Concurrence with the City's Conditional No Further Action was received from K. Toth of DTSC via email on August 16, 2013 and from M. Johnson of the Water Board on October 2, 2013.
   - Next Steps: project completed.

8. **Former UPRR Parcels 1, 2, 3, 4, 4a, 6, 7, and 8**
   - Consultant is EKI
   - Status: remediation complete; draft completion report reviewed
   - Next Steps: EKI and the City are trying to obtain additional information from UPRR re soil volumes excavated, etc., but the status is unknown. Prepare draft deed restriction when receive comments from M. Biddle on draft Parcel D deed restriction.

In the matter of:	)	Docket No. HSA-O&MEA 11/12-096
	)	
Sherwin-Williams	)	
1450 Sherwin Avenue	)	OPERATION AND MAINTENANCE
Emeryville, CA 94608	)	AGREEMENT
	)	
Proponent:	)	
	)	Health and Safety Code
The Sherwin-Williams Company	)	Section 25355.5 (a)(1)(C)
101 Prospect Avenue, 4M	)	
Cleveland, OH 44115	)	

The California Department of Toxic Substances Control (DTSC) and land owner The Sherwin-Williams Company (Proponent) enter into this Operation and Maintenance Agreement (Agreement) for the Proponent's property located at 1450 Sherwin Avenue, Emeryville, Alameda County, California, 94608 and a portion of the adjacent former Rifkin property located at 4525-4563 Horton Street, Emeryville, Alameda County, California, 94608, to which hazardous substances have migrated from the Proponent's property. Collectively the Proponent's property and this portion of the former Rifkin property are referred to as the "Site". Novartis Vaccines and Diagnostics, Inc. (Novartis) is the current owner of the former Rifkin property. The Site consists of approximately 10 acres and was formerly identified by Assessor's Parcel Numbers 049-1041-026-02, 049-1041-026-04, 049-1041-026-06, 049-1041-026-07, 049-1041-005-00 and 049-1041-006-00. The Assessor's Office has subsequently consolidated these Assessor's Parcel Numbers for the two properties and assigned the following new numbers: 049-1041-026-15 for the Proponent's property and 049-1544-001-01 for the former Rifkin property. DTSC and Proponent agree as follows:

1. Jurisdiction. This Agreement is entered into by DTSC and Proponent pursuant to Health and Safety Code section 25355.5(a)(1)(C) which authorizes DTSC to enter into an enforceable agreement to oversee the investigation and/or remediation of a release or threatened release of any hazardous substance at or from the Site, and to oversee the operation and maintenance of any remediation system installed at the Site.

2. Remediation System. After completion of the remedy as described in the Remedial Action Plan (RAP), including removal of over 100,000 tons of impacted vadose zone and saturated zone soils and operation of a groundwater pump and treat system, a long-term groundwater Remediation System was installed consisting of a slurry wall with breaches, an interceptor trench with a membrane barrier, and vadose zone and saturated zone backfill with differing permeabilities, all part of an integrated design to passively control and regulate groundwater movement. The Remediation System also includes a groundwater monitoring well network and monitoring program to evaluate the effectiveness of the groundwater remedy, a soil gas monitoring network and program to evaluate post-remedy soil gas conditions, and a Covenant of Environmental Restrictions recorded on the Property. A site location map and the

assessor's parcel map are attached as Exhibit A and Exhibit B. A site map or diagram showing the location(s) of the Remediation System is attached as Exhibit C.

3. Operation and Maintenance of Remediation System. Operation and maintenance of the Remediation System are required at the Site, and shall be left in place, and operated and maintained by Proponent or with DTSC's approval, any successor property owner. Operation and maintenance of the Remediation System will continue at the Site until and except to the extent that DTSC authorizes Proponent in writing to discontinue or modify part or all of the Remediation System.

4. Implementation of Operation and Maintenance Plan. Proponent shall fully implement the DTSC-approved Operation and Maintenance Plan dated December 11, 2012, and approved by DTSC on December 17, 2012, or any other Operation and Maintenance Plan subsequently approved by DTSC. The current DTSC-approved Operation and Maintenance Plan is attached hereto as Exhibit D, and that Plan or any other Operation and Maintenance Plan subsequently approved by DTSC are hereby incorporated into this Agreement by reference, including any requirements for inspections, monitoring, reporting and record keeping.

5. Modification or Discontinuation of Remediation System. Before modifying or discontinuing any Remediation System component, Proponent shall submit a written request for DTSC's authorization for any modification or discontinuation of the Remediation System or any part thereof, including but not limited to the Operation, Maintenance, and Monitoring Plan, the slurry wall, membrane, backfill, groundwater monitoring well network and/or program, and soil gas monitoring point network and/or program, at least 60 days, to the extent feasible, prior to the intended date of any proposed modification or discontinuation. The written request to DTSC shall include the reasons for the request, a detailed description of any work to be done or modification to be made, and a map showing the exact location of the proposed work. Proponent may seek DTSC's authorization for any such modification or discontinuation of the Remediation System or any part thereof, if: (a) Proponent has met the remediation objectives for the site; or (b) the modification would better or more efficiently and/or more cost-effectively achieve the remediation objectives; or (c) the Remediation System could not achieve the remediation objectives and other cleanup methods will be implemented; or (d) it has been demonstrated that the maximum achievable remediation has occurred; or (e) the modification would be a suitable replacement for an existing component that interferes or otherwise unnecessarily affects development or future use of the property.

6. DTSC-Required Modification. DTSC may require modification, replacement, or additions to the Remediation System if the Remediation System or part of thereof is not achieving the remediation objectives or is not protecting human health or the environment. DTSC may require additional evaluations, designs and the construction and operation of facilities to achieve these objectives. Proponent reserves all of its rights, defenses and remedies available to Proponent under law or equity.

7. Five-Year Review. Proponent shall review and reevaluate the Remediation System after a period of five years from the completion of construction and startup of the Remediation System and every 5 years thereafter, until Proponent demonstrates that it has met the remedial goals for the Site or DTSC issues a written determination that no further five-year reviews are required. The review and reevaluation shall be conducted to determine if human health and the environment are being adequately protected by the Remediation System. Within 30 days before the end of each five-year period, Proponent shall submit a five-year review workplan to DTSC for review and approval. The first five-year review workplan will be submitted by June 1, 2017. Within 60 days of DTSC's approval of the workplan, Proponent shall implement the workplan and submit a report of the results of the five-year review. The report shall describe the results of all sampling analyses, tests and other data generated or received by Proponent and evaluate the adequacy of the implemented remedy in protecting human health and the environment. As a result of any review work performed under this Agreement, DTSC may require Proponent to perform additional review work or modify the review work previously performed by Proponent.

8. Quality Control/Quality Assurance (QC/QA). All sampling and analysis conducted by Proponent under this Agreement shall be performed in accordance with the QC/QA procedures submitted by Proponent and approved by DTSC pursuant to this Agreement.

9. Financial Assurance. Proponent must assure that sufficient funds are available to implement all the requirements of this Agreement and to pay DTSC's costs as specified in Paragraph 10. Proponent has established a letter of credit as the financial assurance mechanism that meets DTSC's requirements pursuant to California Code of Regulations, title 22, section 66265.143.

10. Cost Recovery and Payment.

10.1. Proponent agrees to pay for all of DTSC's costs incurred, in accordance with law, in implementing this Agreement, including costs of overseeing the work performed by Proponent, and in responding to any contamination at the Site. Cost recovery may be pursued by DTSC pursuant to applicable state or federal laws or common law. DTSC will invoice Proponent for DTSC's costs on a quarterly basis. Proponent reserves all of its rights, defenses and remedies available to Proponent under law or equity.

10.2. All payments made by Proponent pursuant to this Agreement shall be by check payable to the "Department of Toxic Substances Control", and bearing on its face the project code for the Site (Site # 200956) and the docket number of this Agreement (Docket No. HSA-O&MEA 11/12-096). Upon request by Proponent, DTSC may accept payments made by credit cards. Payments by check shall be sent to:

Department of Toxic Substances Control
Accounting Office

1001 I Street, 21st Floor
P.O. Box 806
Sacramento, California 95812-0806

A photocopy of the check shall be sent concurrently to DTSC's Project Manager.

10.3. DTSC shall retain all cost records associated with the work performed under this Agreement as may be required by state law. DTSC will make all documents that support DTSC's cost determination available for inspection and copying upon request in accordance with the Public Records Act, Government Code section 6250 et seq.

11. Endangerment During Implementation.

11.1. Proponent shall notify DTSC's Project Manager promptly upon learning of the actual release and/or threatened release of hazardous substances, as defined in Health and Safety Code section 25320, at the Site that may present an imminent and substantial endangerment to the public health or welfare or to the environment. Within seven days of learning of the actual release and/or threatened release, Proponent's Project Manager shall furnish a report to DTSC, signed by Proponent's Project Manager, setting forth the conditions and events that occurred and the measures taken in response thereto.

11.2. In the event DTSC determines that any activity (whether or not pursued in compliance with this Agreement) may pose an imminent or substantial endangerment to the health or safety of people on the Site or in the surrounding area or to the environment, DTSC may order Proponent to conduct additional activities or to stop further implementation of this Agreement for such period of time as may be needed to abate the endangerment. DTSC may request that Proponent implement interim measures to address any immediate threat or imminent or substantial endangerment. Proponent reserves all of its rights, defenses and remedies available to Proponent under law or equity.

12. Site Access. Proponent shall provide, and/or obtain access to the Site and take all reasonable efforts to obtain access to offsite areas to which access is necessary to implement this Agreement. Such access shall be provided to DTSC's employees, contractors, and consultants at all reasonable times to the extent allowed by law. Such access shall also be provided to any other Proponent who is in compliance with this Agreement for the purpose of conducting activities pursuant to this Agreement or for activities deemed necessary by DTSC to meet the objectives of this Agreement. Nothing in this paragraph is intended or shall be construed to limit in any way the right of entry or inspection that DTSC or any other agency may otherwise have by operation of law.

13. Sampling, Data and Document Availability. When requested by DTSC, Proponent shall make available for DTSC's inspection, and shall provide an electronic

copy of, unprivileged data and information related to the performance of this Agreement. For all final reports, Proponent shall submit one hard (paper) copy and one electronic copy with all applicable signatures and certification stamps as a text-readable Portable Document Formatted (pdf) file Adobe Acrobat or Microsoft Word formatted file to DTSC's Project Manager. Proponent reserves all of its rights, defenses and remedies available to Proponent under law or equity.

14. Record Preservation. Proponent shall retain, during the implementation of this Agreement and for a minimum of ten years after its termination, all data, reports, and other documents generated in accordance with this Agreement. If DTSC requests that some or all of these documents be preserved for a longer period of time, Proponent shall either comply with the request, deliver the documents to DTSC, or provide DTSC with a copy of the documents at Proponent's expense prior to destruction.

15. Notification of Field Activities. Proponent shall inform DTSC at least seven calendar days in advance of all field activities pursuant to this Agreement and shall allow DTSC and its authorized representatives to take duplicates of any samples collected by Proponent pursuant to this Agreement.

16. Project Managers. DTSC has designated Nina Bacey as their Project Manager and the Proponent has designated Larry Mencin as their Project Manager. Each Project Manager shall be responsible for overseeing the implementation of this Agreement and for designating a person to act in his/her absence. All communications between DTSC and Proponent, and all notices, documents and correspondence concerning the activities performed pursuant to this Agreement shall be directed through the Project Managers. Each party may change its Project Manager with at least seven days prior written notice.

17. Proponent's Consultant and Contractor. All work performed pursuant to this Agreement shall be under the direction and supervision of a professional engineer or professional geologist, licensed in California, with expertise in hazardous substances site cleanup. Proponent's Project Manager, contractor or consultant shall have the technical expertise sufficient to fulfill his or her responsibilities. Within 14 days of the effective date of this Agreement, Proponent shall notify DTSC's Project Manager in writing of the name, title, and qualifications of the professional engineer or professional geologist and of any contractors or consultants and their personnel to be used in carrying out the work under this Agreement in conformance with applicable state law, including but not limited to, Business and Professions Code sections 6735 and 7835.

18. DTSC Review and Approval. All work performed pursuant to this Agreement is subject to DTSC's review and approval. If DTSC determines that any report, plan, schedule or other document submitted for approval pursuant to this Agreement fails to comply with this Agreement or fails to protect public health or safety or the environment, DTSC may (a) return comments to Proponent with recommended changes and a date by which the Proponent must submit to DTSC a revised document incorporating or addressing the recommended changes; or (b) modify the document in consultation with

Proponent and approve the document as modified. All DTSC approvals and decisions made regarding submittals and notifications will be communicated to Proponent in writing by DTSC's Branch Chief or his/her designee. No informal advice, guidance, suggestions or comments by DTSC regarding reports, plans, specifications, schedules or any other writings by the Proponent shall be construed to relieve Proponent of the obligation to obtain such written approvals.

19. Amendments. This Agreement, including the DTSC-approved Operation and Maintenance Plan, may be amended or terminated by mutual written agreement of DTSC and Proponent. Such amendment or termination shall be effective the third business day following the day the last party signing the amendment or termination sends its notification of signing to the other party. The parties may agree to a different effective date.

20. Incorporation of Exhibits, Plans and Reports. All exhibits are incorporated into this Agreement by reference. All plans, schedules and reports that require DTSC's approval and are submitted by Proponent pursuant to this Agreement are incorporated in this Agreement upon DTSC's approval.

21. Reservation of Rights. DTSC reserves all of its statutory and regulatory powers, authorities, rights, and remedies under applicable laws to protect public health or the environment, including the right to recover its costs incurred therefor. Proponent reserves all of its rights, defenses and remedies available to Proponent under law or equity.

22. Non-Admission of Liability. By entering into this Agreement, Proponent does not admit to any finding of fact or conclusion of law set forth in this Agreement or any fault or liability under applicable laws or equity.

23. Proponent Liabilities. Nothing in this Agreement shall constitute or be considered a covenant not to sue, release or satisfaction from liability by DTSC for any condition or claim arising as a result of Proponent's past, current, or future operations or ownership of the Site.

24. Government Liabilities. The State of California or DTSC shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by Proponent or by related parties in carrying out activities pursuant to this Agreement, nor shall the State of California or DTSC be held as a party to any contract entered into by Proponent or its agents in carrying out the activities pursuant to this Agreement.

25. Third Party Actions. In the event that Proponent is a party to any suit or claim for damages or contribution relating to the Site to which DTSC is not a party, Proponent shall notify DTSC in writing within 10 days after service of the complaint in the third-party action. Proponent shall pay all costs incurred by DTSC relating to such third-party actions, including but not limited to responding to subpoenas. Proponent's agreement

to pay DTSC's costs shall not prevent Proponent from seeking recovery of such costs from the party bringing the litigation.

26. California Law. This Agreement shall be governed, performed and interpreted under the laws of the State of California.

27. Severability. If any portion of this Agreement is ultimately determined not to be enforceable, that portion will be severed from the Agreement and the severability shall not affect the enforceability of the remaining provisions of the Agreement.

28. Parties Bound. This Agreement applies to and is binding, jointly and severally, upon Proponent and its agents, receivers, trustees, successors and assignees, if any, and upon DTSC and any successor agency that may have responsibility for and jurisdiction over the subject matter of this Agreement. Proponent shall ensure that its contractors, subcontractors and agents receive a copy of this Agreement.

29. Effective Date. The effective date of this Agreement is the date of signature by DTSC's authorized representative after this Agreement is first signed by Proponent's authorized representative. Except as otherwise specified, "days" means calendar days.

30. Representative Authority. Each undersigned representative of the party to this Agreement certifies that she or he is fully authorized to enter into the terms and conditions of this Agreement and to execute and legally bind the party to this Agreement.

31. Counterparts. This Agreement may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one and the same document.

Nina Bacey Date: 1/23/13

Nina Bacey,
Project Manager
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control

Richard M. Weaver, VP. Date: 1/10/2013

Richard M. Weaver
Vice President, Corporate Administration
The Sherwin-Williams Company

COMMUNITY Notice

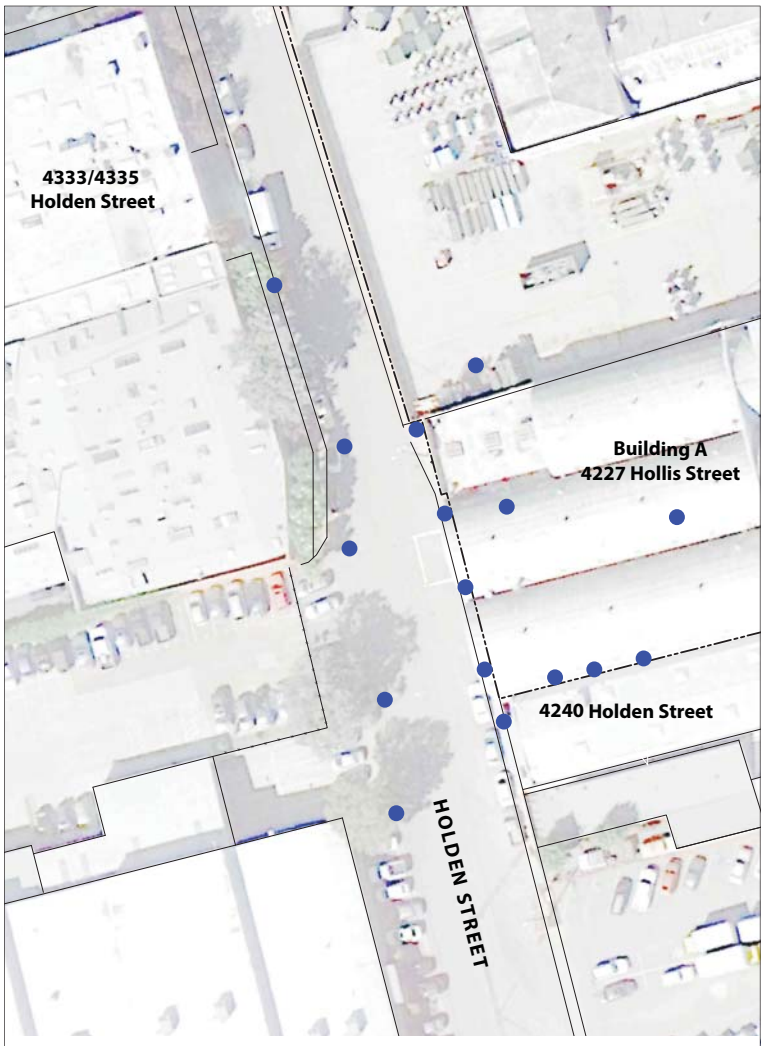
The mission of DTSC is to protect California's people and environment from harmful effects of toxic substances through the restoration of contaminated resources, enforcement, regulation and pollution prevention.

Emeryville Materials Facility
4525 Hollis Street, Emeryville, California 94608

The California Department of Toxic Substances Control (DTSC) wants to update the community on Pacific Gas and Electric Company's (PG&E) environmental investigations of the Emeryville Materials Facility (site) located at 4525 Hollis Street in Emeryville, California (Figure 1).

Off-site Sampling Results

PG&E collected samples of soil, groundwater, and soil gas (air spaces in between particles of soil) from beneath Holden Street and the adjacent sidewalks, near the residences located at 4333 and 4335 Holden Street, and the commercial building located at 4240 Holden Street (Figure 1). Samples of soil, groundwater, and soil gas in this area contain tetrachloroethene (PCE) and trichloroethene (TCE). You may find sampling results in a study called a human health risk evaluation. This evaluation concluded that the calculated health risk to Emeryville residents or workers who live or work near the site falls within the range that DTSC considers safe.



(Figure 1)

On-site Work

Prior environmental assessment activities identified the solvents PCE and TCE above state environmental screening levels in soil, soil gas, and groundwater beneath, and immediately next to, Building A, which is located at 4227 Hollis Street. PCE and TCE are compounds historically found in industrial solvents.

An environmental cleanup will be needed to address the presence of PCE and TCE in soil, soil gas, and groundwater. PG&E has begun to evaluate cleanup alternatives for the contamination associated with Building A. PG&E will continue its groundwater sampling on a quarterly basis beneath Building A and beneath Holden Street.

For More Information

The off-site risk evaluation and other site related documents can be found at the information repository:

Emeryville City Hall
1333 Park Avenue
Emeryville, CA 94608
(510) 596-4300

Hours: Monday - Friday, 9:00 a.m - 5:00 p.m. - to view documents speak with the front desk attendant.

You may also review these project documents at www.envirostor.dtsc.ca.gov/public/

The full administrative record for the site is available at:

Department of Toxic Substances Control - File Room
700 Heinz Avenue
Berkeley, CA 94710
(510) 540-3800 – call for an appointment
Hours: Monday through Friday, 8:00 a.m.-5:00 p.m.

If you have questions about this project, please call either:

- Nathan Schumacher, DTSC Public Participation Specialist, toll free at (866) 495-5651, (916) 255-3650 or by email at nathan.schumacher@dtsc.ca.gov; or
- Homayune Atiqee, DTSC Project Manager, at (510) 540-3838 or by email at homayune.atiqee@dtsc.ca.gov.

If you are from the media, please contact:

- Sandy Nax, DTSC Public Information Officer, at (916) 327-6114 or by email at sandy.nax@dtsc.ca.gov.

NOTICE TO HEARING IMPAIRED INDIVIDUALS: TYY users may use the California Relay Service at 1-877-735-2929 or (711). Please see contact name at the end of report.

2012425154 12/20/2012 09:58 AM
OFFICIAL RECORDS OF ALAMEDA COUNTY
PATRICK O'CONNELL
RECORDING FEE: 0.00

21 PGS

RECORDING REQUESTED BY:
The Sherwin-Williams Company
1450 Sherwin Avenue
Emeryville, California 94608

WHEN RECORDED, MAIL TO:

Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, California 94710
Attention: Karen Toth, Unit Chief

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

COVENANT TO RESTRICT USE OF PROPERTY

ENVIRONMENTAL RESTRICTION

Re: County of Alameda, Assessor Parcel Number (APN) 049-1041-26-15, former Sherwin-Williams Coatings Manufacturing Facility, 1450 Sherwin Avenue, Emeryville, CA, DTSC Site Code Number (200956).

This Covenant and Agreement ("Covenant") to restrict the use of the property is made by and between The Sherwin-Williams Company (the "Covenantor"), the current Owner of property situated at 1450 Sherwin Avenue in the City of Emeryville, County of Alameda, State of California (the "Property"), and the California Department of Toxic Substances Control (the "Department"). Pursuant to Civil Code section 1471, the Department has determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the Property of hazardous materials as defined in Health and Safety Code section 25260. The Covenantor and Department, collectively referred to as the "Parties," hereby agree pursuant to Civil Code section 1471 and Health and Safety Code section 25355.5, to restrict the use of the Property as set forth in this Covenant. The Parties further agree that the Covenant shall conform to the requirements of California Code of Regulations, title 22, section 67391.1 and shall run with the land.

* Recording fee waived per govt code 27383

ARTICLE I
STATEMENT OF FACTS

1.01. Property Location. The Property, totaling approximately 8.55 acres, is more particularly described and depicted in the attached Exhibits "A", the legal description of the Property, and "B", Alameda County Assessor's Map. The Property with the address of 1450 Sherwin Avenue is located in Emeryville, CA, in the area now generally bounded by Horton Street to the east; Sherwin Avenue to the south; the Temescal Creek Channel and the property currently owned by Novartis Vaccine and Diagnostics (Novartis) to the north; and Parcel D owned by the City of Emeryville and the Union Pacific Railroad Emeryville Yard to the west. The Property is also identified as Alameda County Assessor's Parcel No. 049-1041-26-15.

1.02. Installed Remedial Features. A limited portion of the Property is more particularly depicted in Exhibit C, and is referred to as the "Installed Remedial Features." These Installed Remedial Features are described in Section 1.03 and include the following: a slurry wall with breaches, an interceptor trench, a high permeability backfill, a contingent groundwater extraction riser, low permeability soil backfill, and groundwater monitoring wells.

1.03. Remediation. The Property has been remediated pursuant to a Remedial Action Plan ("RAP") developed in accordance with Health and Safety Code, division 20, chapter 6.8 under the oversight of the Department. The RAP, which referenced the Human Health Risk Assessment ("HHRA") previously approved by the California Regional Water Quality Control Board (CRWQCB) in December 2005 and reviewed by the Department as part of its approval of the RAP, and the Mitigated Negative Declaration ("MND") prepared pursuant to the California Environmental Quality Act, Public Resources Code section 21000 *et seq.*, were released for public review and comment and subsequently approved by the Department on June 14, 2010. The RAP was based on the Remedial Investigation ("RI"), the HHRA and the Feasibility Study

("FS") conducted by the Covenantor. Following the Department's approval of the RAP and MND, the Covenantor prepared a Remedial Design Implementation Plan ("RDIP") that was approved by the Department on June 30, 2011. The remedy completion and RDIP modifications were documented in the Remedy Implementation Completion Report ("RICR") approved by the Department on August 7, 2012. The RAP requires a land use covenant that imposes Environmental Restrictions as are accomplished through this Covenant as part of the site remediation, because volatile organic compounds and arsenic, which are hazardous substances as defined in Health and Safety Code section 25316, and hazardous materials as defined in Health and Safety Code section 25260, remain above unrestricted cleanup goals as defined in the RAP in groundwater and/or soil vapor beneath the Property.

The remedial activities included excavation and offsite disposal of unsaturated and saturated soil containing arsenic, lead, and volatile organic compounds (VOCs) including benzene, toluene, and xylenes at concentrations above unrestricted cleanup goals, and installation of the following remedial features: retention of the existing slurry wall that was installed in 1994; extension of the slurry wall; breaches in three locations in the slurry wall to provide for specific groundwater flow channels; installation of a low permeability vertical barrier and high permeability channel to direct groundwater flow; placement of low permeability soil backfill to minimize water infiltration, and installation of groundwater monitoring wells. These Installed Remedial Features and their functions are described in more detail in the following paragraphs and their locations are identified in Exhibit C. The groundwater extraction and treatment system, originally installed as part of the interim remedial measures, is no longer required to control hydraulic gradient, and was shut down and removed in 2011 as part of the final remedy implementation.

The operation and maintenance of the Installed Remedial Features is pursuant to the Operation and Maintenance Plan dated December 11, 2012, (Operation and Maintenance Plan) as approved by the Department on December 17, 2012 and an Operation and Maintenance Agreement between Covenantor and the Department.

Slurry Wall, Slurry Wall Extension, Slurry Wall Breaches. Modifications were made to the existing slurry wall system and were designed to aid in natural groundwater

flow across the Property. These modifications are illustrated in Exhibit C. The slurry wall extension and breaches are designed to function passively to direct groundwater flow to the west, without active operation or maintenance.

Interceptor Trench, High Permeability Backfill, Contingent Groundwater Extraction Riser. A synthetic vertical barrier, designed to divert natural groundwater flow away from the Novartis property and towards the west Property boundary slurry wall breaches, was installed along the northern Property boundary with the Novartis property. The vertical barrier consists of high density polyethylene panels, 60 mil. thick, with high-permeability fill (rock) adjacent to and along the southern side. The barrier and rock fill extend approximately 25 feet below surface (to elevation -14 NAVD88). The high permeability fill area also includes a horizontal perforated pipe that will serve as a contingent groundwater flow channel connected to an in-ground rock fill area. The locations of these features are illustrated in Exhibit C. The rock fill area can be actively pumped to extract groundwater if the passive flow channel and barrier are not sufficient to effect adequate groundwater migration. The interceptor trench and rock sump are designed to function without active operation or maintenance.

Soil Placement to Minimize Water Infiltration. Low permeability soil backfill with a gravel cover was placed across certain areas of the Property. The post-excavation surface areas of the Property are graded so that surface water (precipitation) is directed to a shallow surface swale sloped towards an existing storm drain basin in the northwest corner of the Property. This storm drain basin is plumbed to the Temescal Creek Channel. The final grade plan, swale, and storm drain basin are shown in Exhibit C.

Groundwater Monitoring Wells and Periodic Access for Monitoring. The Operation and Maintenance Plan describes the purpose and need for periodic groundwater elevation and/or quality monitoring in order to verify the effectiveness of the approved remedy. Physical access to these groundwater monitoring wells must be protected.

1.04 Basis for Environmental Restrictions. Groundwater elevation at the Property varies seasonally and is found at 3 to 12 feet below ground surface.

Contaminants in groundwater were compared to California Department of Health Service's Maximum Contaminant Levels (MCL), CRWQCB's Environmental Screening Levels (ESL), risk based threshold levels established in the HHRA, or the CRWQCB Marine Water Quality Objective (MWQO) (arsenic). Contaminants found in groundwater that exceed these screening level goals are: 1,2-dichloroethane, 1,2,3-trichloropropane, acetone, methyl tertiary-butyl ether, toluene, xylenes, and arsenic. The lowest of these screening levels were approved by the Department as Site cleanup goals for groundwater, as follows in milligrams per liter (mg/L):

Contaminant	Cleanup Goal	Reference
1,2-dichloroethane	0.0005 mg/L	ESL
1,2,3-trichloropropane	0.005 mg/L	ESL
Acetone	1.5 mg/L	ESL
Methyl tertiary-butyl ether	0.013 mg/L	MCL
Toluene	0.15 mg/L	MCL
Xylenes	0.02 mg/L	ESL
Arsenic	0.036 mg/L	MWQO

The Department concludes that the use of contaminated groundwater presents an unacceptable threat to human health and safety.

Soil vapor has been found to contain certain volatile organic compounds (benzene and ethylbenzene) at concentrations in excess of residential California Human Health Screening Levels (CHHSLs). The Department concludes that these volatile organic compounds could present an unacceptable threat to human health and safety in building indoor air.

The completed remedial actions described in the RAP and RDIP removed impacted shallow and saturated soils. The remedial actions included installation of the engineered features described in Section 1.03 which are intended to provide long-term control of, and monitoring of, groundwater migration and quality. The Department has concluded that the Property, as remediated, and subject to the Environmental Restrictions of this Covenant, does not present an unacceptable threat to human health or safety, or the environment.

ARTICLE II
DEFINITIONS

2.01. Department. "Department" means the California Department of Toxic Substances Control and includes its successor agencies, if any.

2.02. Environmental Restrictions. "Environmental Restrictions" means all provisions, covenants, restrictions, prohibitions, requirements, terms and conditions of this Covenant.

2.03. Improvements. "Improvements" means buildings, roads, driveways, improved parking areas, wells, pipelines, utilities, structures, fixtures, equipment or facilities.

2.04. Lease. "Lease" means lease, rental agreement, or any other document that creates a right to use or occupy any portion of the Property.

2.05. Occupant. "Occupant" means Owners and any person or entity entitled by ownership, leasehold, or other legal relationship to the right to occupy any portion of the Property.

2.06. Owner. "Owner" means the Covenantor, and all successors in interest including heirs and assigns, who at any time hold title to all or any portion of the Property.

ARTICLE III
GENERAL PROVISIONS

3.01. Runs with the Land. This Covenant sets forth Environmental Restrictions that apply to and encumber the Property and every portion thereof no matter how it is

improved, held, used, occupied, leased, sold, hypothecated, encumbered, or conveyed. This Covenant: (a) runs with the land pursuant to Health and Safety Code section 25355.5 and Civil Code section 1471; (b) inures to the benefit of and passes with each and every portion of the Property; (c) is for the benefit of, and is enforceable by the Department; and (d) is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.02. Binding upon Owners/Occupants. Pursuant to Health and Safety Code section 25355.5, Civil Code section 1471, and Civil Code section 1466, this Covenant binds all Owners of the Property, their heirs, successors, assignees, agents, and employees for the benefit of the Department, during their respective successive periods of ownership or occupancy such that an Owner's or Occupant's rights and obligations under this Covenant shall terminate upon transfer, expiration, or termination of the Owner's or Occupant's interest in the Property; except that such Owner's or Occupant's liability for, and defenses to, any violations of the Environmental Restrictions of this Covenant or any acts or omissions during such ownership or occupancy shall survive any transfer, expiration or termination of the Owner's or Occupant's interest in the Property.

3.03. Incorporation into Deeds and Leases. This Covenant shall be incorporated by reference in each and every deed and Lease for any portion of the Property.

3.04. Conveyance of Property. The Owner shall provide written notice to the Department not later than thirty (30) days after any conveyance of any ownership interest in the Property (excluding Leases, and mortgages, liens, and other non-possessory encumbrances). The written notice shall include the name and mailing address of the new Owner of the Property and shall reference the site name and site code as listed on page one of this Covenant. The notice shall also include the Assessor's Parcel Number (APN) noted on page one. If the new Owner's property has been assigned a different APN, each such APN that covers the Property must be provided. The Department shall not, by

reason of this Covenant, have authority to approve, disapprove, or otherwise affect proposed conveyance, except as otherwise provided by law.

3.05. Costs of Administering the Covenant to be paid by Owner. The Department has already incurred and will in the future incur costs associated with the administration of this Covenant. Therefore, the Covenantor hereby covenants for the Covenantor and for all subsequent Owners that, pursuant to California Code of Regulations, title 22, section 67391.1(h), the Owner agrees to pay the Department's costs in administering the Covenant.

ARTICLE IV
RESTRICTIONS AND REQUIREMENTS

4.01. Prohibited Uses. (a) Any use of the Property which may adversely affect the integrity and effectiveness of the Installed Remedial Features is prohibited; and

(b) Groundwater shall not be used for any purposes other than groundwater monitoring as described in the Operation and Maintenance Plan or upon the Department's advance written approval of a Groundwater Management Plan.

4.02. Soil Management.

(a) No activities that will disturb the soil (e.g., excavation, grading, removal, trenching, filling, earth movement, mining, or drilling) shall be allowed on the Property without the Department's advance written approval of a Soil Management Plan.

(b) Any soils brought to the surface shall be managed in accordance with all applicable provisions of the Soil Management Plan.

4.03. Prohibited Activities. The following activities shall not be conducted at the Property:

(a) Drilling for any water, oil, or gas without prior written approval by the Department.

(b) Extraction of groundwater or removal of groundwater (such as during excavation dewatering), without prior written approval by the Department in a Groundwater Management Plan.

(c) Installation of preferential pathways for groundwater (e.g., unprotected utilities placed below the groundwater table), except those approved by the Department in writing to be solely for the protection, operation and maintenance of the Installed Remedial Features~~, is prohibited~~.

(d) Construction or other development activities which are inconsistent with the Installed Remedial Features.

4.04. Soil Vapor. Prior to construction or other development of the Property, the Owner shall submit to the Department, and obtain the Department's approval of, an evaluation of soil vapor conditions and indoor air quality. The Department may require further investigation and/or implementation of engineering controls to address the potential for indoor vapor intrusion.

4.05. Non-Interference with Installed Remedial Features.

(a) Activities that may disturb the Installed Remedial Features described in sections 1.02 and 1.03 above, shall not be permitted on the Property without prior written approval by the Department.

(b) All uses and development of the Property shall preserve the integrity or effectiveness of the Installed Remedial Features described in sections 1.02 and 1.03 above.

(c) The Installed Remedial Features described in sections 1.02 and

1.03 above shall not be altered or removed without prior written approval by the Department.

4.06. Access for Department. The Department shall have reasonable right of entry and access to the Property for inspection, monitoring, and other activities consistent with the purposes of this Covenant as deemed necessary by the Department, in order to protect the public health or safety, or the environment.

4.07. Access for Implementing Operation and Maintenance. The entity or person responsible for implementing the Department-approved Operation and Maintenance Plan, shall have reasonable right of entry and access to the Property for the purpose of implementing the Operation and Maintenance Plan until the Department determines that no further Operation and Maintenance are required.

4.08. Inspection and Reporting Requirements. The Owner shall conduct an annual inspection of the Property verifying compliance with this Covenant, and shall submit an annual inspection report to the Department for its approval by July 31st of each year. The annual inspection report must include the dates, times, and names of those who conducted the inspection and reviewed the annual inspection report. It also shall describe how the observations were performed that were the basis for the statements and conclusions in the annual inspection report (e.g., drive by, fly over, walk in, etc.). If violations are noted, the annual inspection report must detail the steps taken to return to compliance. If the entity implementing the Operation, Maintenance and Monitoring Plan identifies any violations of this Covenant during the annual inspections or at any other time, the entity must within 14 calendar days of identifying the violation: determine the identity of the party in violation, send a letter advising the party of the violation of the Covenant, and demand that the violation cease immediately. Additionally, copies of any correspondence related to the violation of this Covenant shall be sent to the Department within 14 calendar days of its original transmission.

ARTICLE V
ENFORCEMENT

5.01. Enforcement. Failure of the Owner or Occupant to comply with this Covenant shall be grounds for the Department to require modification or removal of any Improvements constructed or placed upon any portion of the Property in violation of this Covenant. Violation of this Covenant, including but not limited to, failure to submit, or the submission of any false statement, record or report to the Department, shall be grounds for the Department to pursue administrative, civil, or criminal actions, as provided by law.

ARTICLE VI
VARIANCE, REMOVAL, AND TERM

6.01. Variance from Restriction. Any person may apply to the Department for a written variance from any or all of the Environmental Restrictions imposed by this Covenant. Such application shall be made in accordance with Health and Safety Code section 25223.

6.02 Removal of Restriction. Any person may apply to the Department to remove any or all of the Environmental Restrictions imposed by this Covenant. Such application shall be made in accordance with Health and Safety Code section 25224.

6.03 Term. Unless ended in accordance with paragraph 6.02, by law, or by the Department in the exercise of its discretion, this Covenant shall continue in effect in perpetuity.

ARTICLE VII
MISCELLANEOUS

7.01. No Dedication Intended. Nothing set forth in this Covenant shall be

construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof to the general public or anyone else for any purpose whatsoever.

7.02. Recordation. The Covenantor shall record this Covenant, with all referenced Exhibits, in the County of Alameda within 14 calendar days of the Covenantor's receipt of a fully executed original.

7.03. Notices. Whenever any person gives or serves any Notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, or (2) five calendar days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Owner: Office of The General Counsel
The Sherwin-Williams Company
Attn: Secretary & General Counsel
101 Prospect Ave., N.W.
Cleveland, OH 44115

And To Dept.: Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, California 94710
Attention: Nina Bacey, Project Manager

Any party may change its address or the individual to whose attention a Notice is to be sent by giving written Notice in compliance with this paragraph.

7.04. Partial Invalidity. If this Covenant or any of its terms are determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.

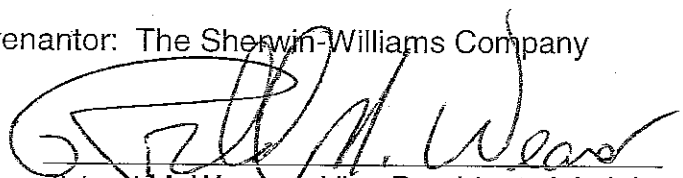
7.05. Statutory References. All statutory references include successor provisions.

7.06. Incorporation of Attachments. All attachments and exhibits to this Covenant are incorporated herein by reference.

7.07. Covenantor's Right to a Separate Covenant. The Department acknowledges that Covenantor has the right under Civil Code section 1471 to record a separate covenant on the Property without the Department as a signatory on the separate covenant.

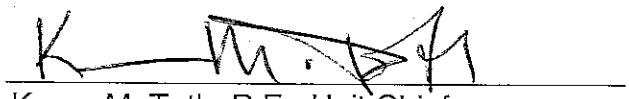
IN WITNESS WHEREOF, the Parties execute this Covenant.

Covenantor: The Sherwin-Williams Company

By: 
Title: Richard M. Weaver, Vice President, Administration

Date: 12-11-2012

Department of Toxic Substances Control:

By: 
Title: Karen M. Toth, P.E., Unit Chief

Date: 12/19/2012

State of California
County of Alameda

On December 19, 2012 before me;

Nicole Thuemmler Notary Public

(space above this line is for name and title of the officer/notary),

personally appeared Karen Toth, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

Nicole Thuemmler (seal)

Signature of Notary Public

NICOLE THUEMMLER
Commission # 1930284
Notary Public - California
Alameda County
My Comm. Expires Mar 26, 2015

State of California
County of Alameda

On December 11 2012 before me,

Joan B Wactor

(space above this line is for name and title of the officer/notary),

personally appeared Richard M. Weaver, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

Joan B Wactor (seal)
Signature of Notary Public

JOAN B. WACTOR
Commission # 1981775
Notary Public - California
Alameda County
My Comm. Expires Jun 11, 2016

Exhibit A- the legal description of the property

Exhibit B - Alameda County Assessor's Map

Exhibit C – depiction of Installed Remedial Features

Exhibit A - Legal Description of the Property

LEGAL DESCRIPTION

The land referred to herein is situated in the State of California, County of Alameda, City of Emeryville, and described as follows:

PARCEL ONE:

PARCEL "A" AS REFLECTED ON THE DOCUMENT ENTITLED "LOT LINE ADJUSTMENT PLAT MAP: DATED SEPTEMBER 1, 1993 AND RECORDED SEPTEMBER 30, 1994, SERIES NO. 94-220319 ALAMEDA COUNTY RECORDS, DESCRIBED AS FOLLOWS:

BEING ALL OF PARCEL 1, AS DESCRIBED IN THE DEED RECORDED NOVEMBER 16, 1962 ON REEL 726, IMAGE 270, ALAMEDA COUNTY RECORDS, ALSO BEING ALL OF PARCEL 1, AS DESCRIBED IN THE DEED RECRODED SEPTEMBER 20, 1963 ON REEL 996, IMAGE 946, ALAMEDA COUNTY RECORDS, ALSO BEING ALL OF PARCELS 1 AND 2, AS DESCRIBED IN THE DEED RECORDED DECEMBER 31, 1964 ON REEL 1405., IMAGE 341, ALAMEDA COUNTY RECORDS, ALSO BEING A PORTION OF THE PARCEL OF LAND AS DESCRIBED IN THE DEED RECORDED OCTOBER 14, 1920 IN BOOK 3003 OF DEEDS AT PAGE 128, ALAMEDA COUNTY RECORDS, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEASTERLY CORNER OF PARCEL 1 AS DESCRIBED IN SAID DEED RECORDED NOVEMBER 16, 1962, SAID CORNER BEING THE INTERSECTION OF THE NORTHERLY LINE OF SHERWIN AVENUE AND THE WESTERLY LINE OF HORTON AVENUE; THENCE ALONG THE SOUTHERLY LINE OF THE LAST SAID PARCEL 1, SOUTH 72 DEGREES 28 MINUTES 00 SECONDS WEST, 233.37 FEET TO THE SOUTHEASTERLY CORNER LINE OF SAID PARCEL 1 AS DESCRIBED IN SAID DEED RECORDED SEPTEMBER 20, 1963; THENCE ALONG THE SOUTHERLY LINE AND THE WESTERLY LINE OF LAST SAID PARCEL 1 THE FOLLOWING FIVE COURSES: SOUTH 72 DEGREES 28 MINUTES 00 SECONDS WEST, 235.30 FEET; THENCE NORTH 14 DEGREES 39 MINUTES 15 SECONDS WEST, 295.00 FEET; THENCE SOUTH 75 DEGREES 20 MINUTES 45 SECONDS WEST, 20.50 FEET; THENCE NORTH 14 DEGREES 39 MINUTES 15 SECONDS WEST, 220.24 FEET; THENCE NORTH 03 DECREES 40 MINUTES 30 SECONDS WEST, 159.50 FEET TO THE SOUTHWESTERLY CORNER OF PARCEL 1, AS DESCRIBED IN SAID DEED RECORDED DECEMBER 31, 1964; THENCE ALONG THE WESTERLY AND NORTHERLY LINE OF LAST SAID PARCEL 1 THE FOLLOWING FIVE COURSES; NORTH 14 DEGREES 39 MINUTES 15 SECONDS WEST, 52.51 FEET; THENCE SOUTH 75 DEGREES 20 MINUTES 45 SECONDS WEST, 6.09 FEET; THENCE NORTH 03 DEGREES 40 MINUTES 30 SECONDS WEST 229.01 FEET THENCE NORTH DEGREES 56 MINUTES 48 SECONDS WEST, 131.30 FEET; THENCE NORTH 75 DEGREES 26 MINUTES 12 MINUTES EAST, 44.59 FEET TO THE MOST NORTHERLY CORNER OF LAST SAID PARCEL 1; THENCE NORTH 75 DEGREES 28 MINUTES 26 SECONDS EAST, 37.50 FEET TO THE NORTHWESTERLY CORNER OF PARCEL 2, AS DESCRIBED IN LAST SAID DEED, RECORDED DECEMBER 31, 1964; THENCE ALONG THE NORTHERLY LINE AND EASTERLY PROLONGATION OF SAID NORTH LINE OF SAID PARCEL 2, NORTH 75 DEGREES 20 MINUTES 45 SECONDS EAST, 84.63 FEET TO THE EASTERLY LINE OF PARCEL 2, AS DESCRIBED IN SAID DEED RECORDED OCTOBER 14, 1920; THENCE ALONG SAID EASTERLY LINE SOUTH 14 DEGREES 39 MINUTES 15 SECONDS EAST, 468.18 FEET TO THE NORTHERLY LINE OF PARCEL 1, AS DESCRIBED IN SAID DEED RECORDED NOVEMBER 16, 1962; THENCE ALONG SAID NORTHERLY AND EASTERLY LINE OF THE LAST SAID PARCEL 1 THE FOLLOWING TWO COURSES: NORTH 72 DEGREES 28 MINUTES 00 SECONDS EAST, 203.29 FEET; THENCE SOUTH 17 DEGREES 32 MINUTES 00 SECONDS EAST, 598.02 FEET TO THE POINT OF BEGINNING.

A) EXCEPTING ALL OF THE MINERALS AND MINERAL ORES OF EVERY KIND AND CHARACTER NOW KNOWN TO EXIST OR HEREAFTER DISCOVERED UPON, WITHIN OR UNDERLYING SAID LAND OR THAT MAY BE PRODUCED THEREFROM, INCLUDING, WITHOUT LIMITENG THE GENERALITY OF THE FOREGOING, ALL PETROLEUM, OIL, NATURAL GAS AND OTHER HYDROCARBON SUBSTANCES AND PRODUCTS DERIVED THEREFROM, TOGETHER WITH THE EXCLUSIVE AND PERPETUAL RIGHT OF INGRESS AND EGRESS BENEATH THE SURFACE OF SAID LAND BELOW A DEPTH OF 500 FEET TO EXPLORE FOR, EXTRACT, MINE AND REMOVE THE SAME, AND TO MAKE SUCH USE OF THE SAID LAND BELOW SAID DEPTH AS IS NECESSARY OR USEFUL IN CONNECTION THEREWITH, WHICH USE MAY INCLUDE LATERAL OR SLANT DRILLING, BORING, DIGGING OR SINKING OF WELLS, SHAFTS OR TUNNELS; PROVIDED, HOWEVER, SHALL NOT USE THE SURFACE OF SAID LAND IN THE EXERCISE ANY OF SAID RIGHTS, SHALL NOT DISTURB THE SURFACE OF SAID LAND OR ANY IMPROVEMENTS THEREON, AND SHALL NOT USE OR PENEYRATE SAID LAND WITHIN 500 FEET OF THE SURFACE THEREOF, AS RESERVED IN THE DEED RECORDED SEPTEMBER 20, 1963, REEL 996, IMAGE 946, ALAMEDA COUNTY RECORDS AND IN THE DEED RECORDED DECEMBER 31, 1964, ON REEL 1405, IMAGE 341, SERIES NO. AW-209382, ALAMEDA COUNTY RECORDS.

B) THAT PORTION THEREOF GRANTED IN THE DEED TO CHIRON PROPERTIES, INC., A CALIFORNIA CORPORATION, RECORDED AUGUST 5, 2004, SERIES NO. 2004-357995, OFFICIAL RECORDS.

PARCEL TWO:

A NON-EXCLUSIVE EASEMENT FOR ROADWAY PURPOSES, AS CREATED IN TEE DEED RECORDED SEPTEMBER 30, 1983, ON REEL 996, IMAGE 946, SERIES NO. AU-156519, ALAMEDA COUNTY RECORDS. DESCRIBED AS FOLLOWS:

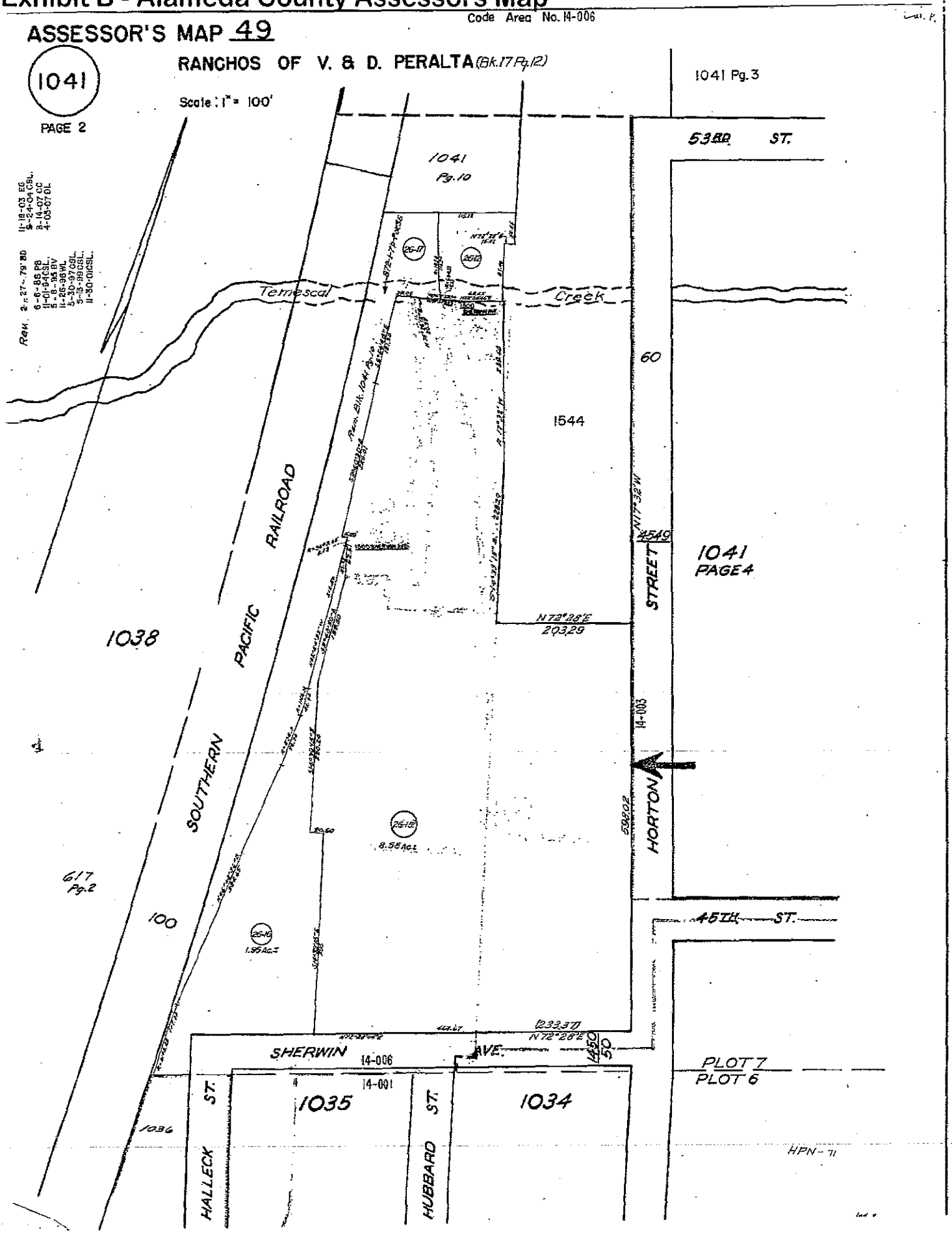
BEGINNING AT A POINT IN THE SOUTHERLY LINE OF THAT CERTAIN 0.010 ACRE PARCEL OF LAND DESCRIBED IN THE DEED DATED AUGUST 3, 1925 FROM THE MAE ESTATE TO SOUTHERN PACIFIC RAILROAD COMPANY RECORDED AUGUST 8, 1925, IN BOOK 1123, PAGE 11, ALAMEDA COUNTY RECORDS, DISTANT THEREON SOUTH 72 DEGREES 28 MINUTES WEST, 205.26 FEET FROM THE MOST EASTERLY CORNER OF SAID 0.010 OF AN ACRE PARCEL OF LAND (SAID SOUTHERLY LINE BEING ALSO THE NORTHERLY LINE OF PLOT NO.6 AS SHOWN ON KELLERSBERGER'S MAP OF THE RANCHOS OF VINCENTE AND DOMINGO PERALTA); THENCE NORTH DEGREES 00 MINUTES WEST LEAVING SAID SOUTHEASTERLY LINE 123.18 FEET TO A POINT IN A LINE PARALLEL WITH AND DISTANT 255.00 FEET WESTERLY; MEASURED AT RIGHT ANGLES, FROM THE EASTERLY LINE OF LAND DESCRIBED AS PARCEL NO. 2 IN THE DEED DATED OCTOBER 7, 1920, FROM THE MAE ESTATE TO SOUTHERN PACIFIC RAILROAD COMPANY, RECORDED OCTOBER 14, 1920 IN BOOK 3003 OF DEEDS, PAGE 128, ALAMEDA COUNTY RECORDS; THENCE NORTH 14 DEGREES 39 MINUTES 15 SECONDS WEST ALONG SAID PARALLEL LINE 204.91 FEET; THENCE NORTH 32 DEGREES 00 MINUTES 30 SECONDS WEST 51.96 FEET TO A POINT IN A LINE PARALLEL WITH AND DISTANT 270.50 FEET WESTERLY, MEASURED AT RIGHT ANGLES, FROM SAID EASTERLY LINE OF PARCEL NO. 2; THENCE ORTH 14 MARCH 39 MINUTES 15 SECONDS WEST ALONG LAST SAID PARALLEL LINE 200.70 FEET; THENCE NORTH 03 DEGREES 40 MINUTES 30 SECONDS WEST 211.56 FEET; THENCE NORTH 75 DEGREES 20 MINUTES 45 SECONDS EAST 5.09 FEET TO A POINT IN A LINE PARALLEL WITH AND DISTANT 225.13 FEET WESTERLY, MEASURED AT RIGHT ANGLES FROM SAID EASTERLY LINE OF PARCEL NO.2; THENCE SOUTH 14 DEGREES 39 MINUTES 15 SECONDS EAST ALONG LAST SAID PARALLEL LINE 52.51 FEET; THENCE SOUTH 03 DEGREES 40

MINUTES 30 SECONDS EAST 159.50 FEET TO A POINT IN A LINE PARALLEL WITH AND DISTANT 255.50 FEET WESTERLY, MEASURED, AT RIGHT ANGLES, FROM SAID EASTERLY LINE OF PARCEL NO.2; THENCE SOUTH 14 DEGREES 39 MNUTES 15 SECONDS EAST ALONG LAST SAID PARALLEL LINE 220.24 FEET; THENCE NORTH 75 DEGREES 20 MINUTES 45 SECONDS EAST 20.50 FEET TO A POINT IN A LINE PARALLEL WITH AND DISTANT 235.00 FEET WESTERLY, MEASURED AT RIGHT ANGLES, FROM SAID EASTERLY LINE OF PARCEL NO. 2; THENCE SOUTH 14 DECREES 39 MINUTES 15 SECONDS EAST ALONG LAST SAID PARALLEL LINE 355.08 FEET TO THE POINT OF BEGINNING.

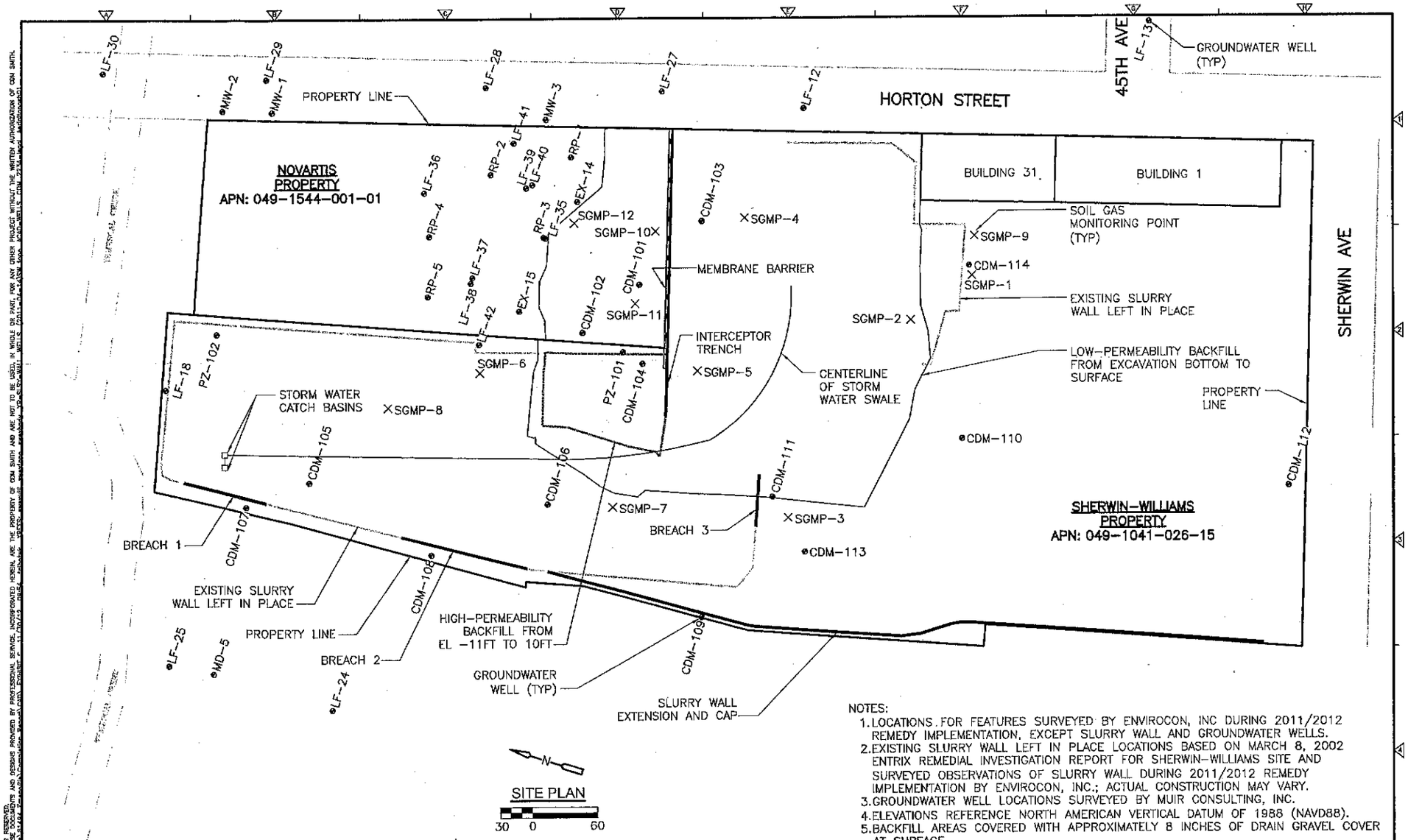
APN: 049-1041-026-15

(End of Legal Description)

Exhibit B - Alameda County Assessors Map



Description: Alameda,CA Assessor Map - Book.Page 49.1041 Page: 2 of 10
Order: 372285 Comment:



NOTES:
1. LOCATIONS FOR FEATURES SURVEYED BY ENVIROCON, INC DURING 2011/2012 REMEDY IMPLEMENTATION, EXCEPT SLURRY WALL AND GROUNDWATER WELLS.
2. EXISTING SLURRY WALL LEFT IN PLACE LOCATIONS BASED ON MARCH 8, 2002 ENTRIX REMEDIAL INVESTIGATION REPORT FOR SHERWIN-WILLIAMS SITE AND SURVEYED OBSERVATIONS OF SLURRY WALL DURING 2011/2012 REMEDY IMPLEMENTATION BY ENVIROCON, INC.; ACTUAL CONSTRUCTION MAY VARY.
3. GROUNDWATER WELL LOCATIONS SURVEYED BY MUIR CONSULTING, INC.
4. ELEVATIONS REFERENCE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
5. BACKFILL AREAS COVERED WITH APPROXIMATELY 8 INCHES OF DRAIN GRAVEL COVER AT SURFACE.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: ____
DRAWN BY: ____
SHEET CHK'D BY: ____
CROSS CHK'D BY: ____
APPROVED BY: ____
DATE: NOVEMBER 2012

CDM Smith
100 Pringle Avenue, Suite 300
Walnut Creek, CA 94596
Tel: (925) 933-2900

SHERWIN-WILLIAMS COMPANY
1450 SHERWIN AVENUE
EMERYVILLE, CA

EXHIBIT C
COVENANT TO RESTRICT USE OF PROPERTY
EVIRONMENTAL RESTRICTION
INSTALLED REMEDIAL FEATURES

PROJECT NO. 13452-81494
FILE NAME: EXHIBIT C
SHEET NO.

CDM SMITH ALL RIGHTS RESERVED.
COPYRIGHT © 2012 CDM SMITH
REUSE OF DOCUMENTS
THESE DOCUMENTS AND IDEAS PROVIDED BY PROFESSIONAL SERVICES, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM SMITH AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
ENVIROSTOR

SHERWIN WILLIAMS (60000189)

SIGN UP FOR EMAIL ALERTS

1450 SHERWIN AVENUE
EMERYVILLE, CA 94608
ALAMEDA COUNTY
SITE TYPE: STATE RESPONSE OR NPL

PROJECT MANAGER: JUANITA (NINA) BACEY
SUPERVISOR: KAREN TOTH
OFFICE: CLEANUP BERKELEY
PUBLIC PARTICIPATION SPECIALIST: NATHAN SCHUMACHER

Site Information

CLEANUP STATUS
CERTIFIED / OPERATION & MAINTENANCE AS OF 1/25/2013

SITE TYPE: STATE RESPONSE OR NPL
NATIONAL PRIORITIES LIST: NO
ACRES: 10 ACRES
APN: 049 104102615, 049-1041-005-00, 049-1041-006-00, 049-1041-006-04, 049-1041-026-02, 049-1041-026-06, 049-1041-026-07
CLEANUP OVERSIGHT AGENCIES:
ALAMEDA COUNTY
RWQCB 2 - SAN FRANCISCO BAY
DTSC - SITE CLEANUP PROGRAM - LEAD
ASSOCIATED GEOTRACKER PROJECTS

ENVIROSTOR ID: 60000189
SITE CODE: 200956
SPECIAL PROGRAM: DESIGNATION OF SINGLE AGENCY
FUNDING: RESPONSIBLE PARTY
ASSEMBLY DISTRICT: 15
SENATE DISTRICT: 09

Regulatory Profile

PAST USE(S) THAT CAUSED CONTAMINATION
MANUFACTURING - PESTICIDES, MANUFACTURING - PAINT

POTENTIAL CONTAMINANTS OF CONCERN
ACETONE
METALS
PETROLEUM
VOLATILE ORGANICS (8260B VOCS)

POTENTIAL MEDIA AFFECTED
OTHER GROUNDWATER AFFECTED (USES OTHER THAN DRINKING WATER), SOIL

Site History

The Site is bounded by Horton Street to the east, the former Rifkin Property and Temescal Creek to the north, Sherwin Street to the south and railroad tracks to the west. The Site is currently defined as the Sherwin-Williams' property located at 1450 Sherwin Street and a portion of the adjacent former Rifkin Property located at 4525-4563 Horton Street impacted by hazardous materials from the Sherwin-Williams property. The area is mixed use, comprised primarily of industrial and commercial properties with some residential use. Sherwin-Williams Company owns and operates a coatings manufacturing plant onsite. The plant has been in operation since the early 1900s, manufacturing various types of coating products. Sherwin-Williams also produced lead-arsenate pesticides at the plant from approximately the 1920s until the late 1940s. The plant is currently used for latex paint manufacturing, packaging and storage of raw materials and paint products and laboratory space.

Land Use Restrictions

DISCLAIMER: The land use restrictions listed under the site management requirements are only an abbreviated summary of the land use restrictions, and may not encompass all restrictions and notification requirements placed on a property. For complete land use restriction information please see the Land Use Restriction document by, clicking on the "VIEW COVENANT" link.

	DATE RECORDED	SITE MANAGEMENT REQUIREMENTS
[VIEW COVENANT]	12/19/2012	• LAND USE COVENANT • NO GROUNDWATER EXTRACTION AT ANY DEPTH WITHOUT APPROVAL • ACTIVITIES PROHIBITED WHICH DISTURB THE REMEDY AND MONITORING SYSTEMS WITHOUT APPROVAL • NOTIFY AFTER CHANGE OF PROPERTY OWNER • NO OIL OR GAS EXTRACTION AT ANY DEPTH

Future Activities

NOTE: THE DUE DATES OF FUTURE ACTIVITIES ARE SUBJECT TO CHANGE BASED ON THE PROGRESS OF CURRENTLY SCHEDULED ACTIVITIES

DOCUMENT TYPE	DUE DATE
Operations and Maintenance Report	2015
5 Year Review Reports	2016
Operations and Maintenance Report	2016

Completed Activities

	DOCUMENT TYPE	DATE COMPLETED	COMMENTS
[VIEW DOCS]	Long Term Monitoring Report	1/8/2015	gw monitoring continues to demonstrate that the remedy is consistent with the remedy effectiveness criteria.
[VIEW DOCS]	Financial Assurance Documentation	11/17/2014	
	Fieldwork	10/30/2014	
[VIEW DOCS]	Annual Oversight Cost Estimate	9/22/2014	
[VIEW DOCS]	Long Term Monitoring Report	8/11/2014	
[VIEW DOCS]	Correspondence	7/30/2014	
	Fieldwork	7/11/2014	
	Fieldwork	5/5/2014	
[VIEW DOCS]	Technical Workplan	4/21/2014	Hydrasleeves to be used to sample groundwater
[VIEW DOCS]	Correspondence	4/4/2014	
[VIEW DOCS]	Long Term Monitoring Report	2/25/2014	GW monitoring results; At majority of groundwater monitoring wells, chemicals of concern (COCs) concentration trends are statistically stable (1 well increasing); groundwater movement patterns are consistent with the projected design.
	Fieldwork	2/21/2014	
	Fieldwork	2/13/2014	
	Fieldwork	10/11/2013	GW monitoring event completed
[VIEW DOCS]	Annual Oversight Cost Estimate	9/10/2013	
[VIEW DOCS]	Long Term Monitoring Report	8/26/2013	Remedy implementation at the Site is effective; All wells that have sufficient groundwater data to make an evaluation, COC concentrations are below cleanup goals and/or concentration trends are statistically stable or decreasing. Also, groundwater movement patterns are consistent with the projected design conditions.
[VIEW DOCS]	Operations and Maintenance Report	8/15/2013	
	Fieldwork	7/19/2013	
[VIEW DOCS]	Correspondence	6/3/2013	
	Fieldwork	6/3/2013	
	Fieldwork	4/26/2013	
[VIEW DOCS]	Long Term Monitoring Report	4/16/2013	
[VIEW DOCS]	Long Term Monitoring Report	4/16/2013	
[VIEW DOCS]	Correspondence	2/4/2013	
	Fieldwork	1/25/2013	
[VIEW DOCS]	Certification	1/23/2013	
[VIEW DOCS]	Operation & Maintenance Order/Agreement	1/23/2013	
	Fieldwork	1/18/2013	
[VIEW DOCS]	Land Use Restriction	12/19/2012	
[VIEW DOCS]	Operations and Maintenance Plan	12/17/2012	
[VIEW DOCS]	Long Term Monitoring Report	9/25/2012	
[VIEW DOCS]	Annual Oversight Cost	9/21/2012	

	Estimate		
	Fieldwork	8/24/2012	
[VIEW DOCS]	Correspondence	8/21/2012	
[VIEW DOCS]	Monitoring Plan	8/13/2012	
[VIEW DOCS]	Remedial Action Completion Report	8/7/2012	
[VIEW DOCS]	Work Notice	5/24/2012	
	Fieldwork	4/12/2012	Remediation of soil complete. GW monitoring wells in place for continued GW monitoring.
[VIEW DOCS]	Long Term Monitoring Report	2/23/2012	
[VIEW DOCS]	Newsletter	2/8/2012	
[VIEW DOCS]	Long Term Monitoring Report	12/6/2011	
[VIEW DOCS]	*Correspondence - Received	10/24/2011	Slurry wall extended & 1 breach relocated. Approved with the condition that 1 more monitoring well be added.
[VIEW DOCS]	*Correspondence - Received	10/5/2011	
[VIEW DOCS]	Long Term Monitoring Report	9/27/2011	Report approved w/comments.
[VIEW DOCS]	Annual Oversight Cost Estimate	9/26/2011	
[VIEW DOCS]	July Monthly Summary Report	8/5/2011	
[VIEW DOCS]	Correspondence	7/19/2011	
[VIEW DOCS]	Correspondence	7/15/2011	
[VIEW DOCS]	Correspondence	7/14/2011	
[VIEW DOCS]	Design/Implementation Workplan	7/1/2011	
[VIEW DOCS]	Daily Air Monitoring Reports (Week of 6/20)	6/24/2011	Daily real-time air monitoring logs for week of 6/20.
[VIEW DOCS]	Daily Air Monitoring Reports (Week of 6/13)	6/21/2011	Daily Air Monitoring Reports for Week of 6/13.
[VIEW DOCS]	Work Notice	6/10/2011	Work notice announcing start of Raised Cap removal anticipated to begin the week of 6/20/2011. Next community open house scheduled for 6/30/2011 at Emeryville City Council Chambers.
[VIEW DOCS]	Work Notice	4/15/2011	Work notice announcing drilling to collect soil samples, installation of 44 soil vapor extraction wells to remove soil vapors and abandonment of 62 monitoring wells.
[VIEW DOCS]	Technical Workplan	7/30/2010	Work Plan approved. The Work Plan proposes to collect lithologic information to test assumptions made in the groundwater model to support the design of the final remedy. The Work Plan also proposes to collect soil for waste disposal companies to use in preparing how to handle the soil safely and appropriately.
[VIEW DOCS]	CEQA - Initial Study/ Neg. Declaration	6/14/2010	DTSC approved the Final Negative Declaration and prepared a Notice of Determination after responding to the comments received.
[VIEW DOCS]	Remedial Action Plan	6/14/2010	DTSC approves Final Remedial Action Plan. Remedial Design scheduled to be submitted in September 2010, with implementation tentatively scheduled to begin in late-February/March 2011.
[VIEW DOCS]	Long Term Monitoring Report	5/26/2010	No significant changes noted from previous reports.
[VIEW DOCS]	Fact Sheets	10/23/2009	Fact Sheet for the Draft Remedial Action Plan and CEQA Mitigated Negative Declaration approved for distribution to the Sherwin-Williams Site mailing list.
[VIEW DOCS]	September 2009 Monthly Summary Report	10/8/2009	Report accepted.
[VIEW DOCS]	August 2009 Monthly Summary Report	9/3/2009	Report accepted. DTSC anticipates issuance of its comments on the Draft RAP and to continue its CEQA evaluation this month.
[VIEW DOCS]	July 2009 Monthly Summary Report	8/17/2009	Report adequate. Still working on draft RAP and CEQA Initial Study.
[VIEW DOCS]	Monthly Summary Report	7/21/2009	During June 2009, the groundwater extraction and treatment system continued to operate. Sherwin-Williams and DTSC met wih the City of Emeryville to discuss potential CEQA issues associated with the proposed alternative described in the Feasibility Study. The CWG review draft Remedial Action Plan was sent out to the Consultative Work Group (CWG).

[VIEW DOCS]	Monitoring Report	5/8/2009	The groundwater extraction and treatment system operated for at least one hour a day for 78 days during the current quarter. 944,100 gallons of water was extracted and treated (representing an average flow rate of 8.41 gpm during days of normal operation). The treatment system removed approximately 138 pounds of arsenic and 10 pounds of VOCs.
[VIEW DOCS]	Feasibility Study Report	5/7/2009	Approved Feasibility Study Report and PHERA Report together. PHERA Report found that potential releases of chemicals of concern from soil, soil gas and groundwater during excavation could be controlled with sufficient dust and vapor controls. Therefore, proposed excavation of approximately 64,000 cubic yards of soil is considered implementable and the FS Report is approved.
[VIEW DOCS]	* RAGS Part C Report	5/7/2009	DTSC approved the Public Health Evaluation of the Remedial Alternative (PHERA) that analyzed the potential risks to the surrounding community from the implementation of the proposed cleanup action at the Site. The evaluated cleanup action consists of digging up approximately 70,000 cubic yards of soil containing arsenic, lead and/or volatile organic compounds (VOCs) over a six-month period and transporting it for offsite disposal.
[VIEW DOCS]	April 2009 Monthly Report	5/6/2009	April Monthly Summary Report. Sherwin-Williams submitted the final Feasibility Study (FS) and Public Health Evaluation of the Remedial Alternative (PHERA) Reports. Conducted a briefing for the Artist's Coop regarding the PHERA Report.
[VIEW DOCS]	Fact Sheets	4/14/2009	Fact Sheet describing the Public Health Evaluation of the Remedial Alternative mailed out on 4/14/2009 to the Sherwin-Williams site mailing list.
[VIEW DOCS]	March 2009 Monthly Report	4/6/2009	Monthly Report for March 2009 adequately documents activities conducted during March 2009.
[VIEW DOCS]	January 2009 Monthly Summary Report	2/9/2009	Continuing to work on the PHERA and the revised FS Report
[VIEW DOCS]	Combined Groundwater & NPDES Report for October 1 to December 30, 2008	2/9/2009	The groundwater extraction and treatment system (GWETS) operated for at least one hour/day during 83 days of the current quarter (October 1 to December 30, 2008). 648,500 gallons of water was extracted and treated, removing approximately 192 pounds of arsenic and 4 pounds of VOCs.
[VIEW DOCS]	December 2008 Monthly Summary Report	1/8/2009	Continuing to work on the PHERA and revised Feasibility Study.
[VIEW DOCS]	November 2008 Monthly Status Report	12/8/2008	Report accepted.
[VIEW DOCS]	October 2008 Monthly Report	11/12/2008	Monthly Summary Report notes that work continues on the Feasibility Study and Public Health Assessment for the Remedial Alternative (PHERA). CWG meeting also held to discuss PHERA.
[VIEW DOCS]	Technical Report	11/8/2008	Letter report summarizing the results of additional investigation conducted in support of the Remedial Action Plan and Remedial Design.
[VIEW DOCS]	July 1 to September 30, 2008 Combined Groundwater and NPDES Self-Monitoring Report	10/30/2008	Treatment system operated for approximately 84 days with the largest shutdown of less than 48 hours. 448,840 gallons of water were treated, removing approximately 18 pounds of arsenic and 0.3 pounds of VOCs. Average flow rate was approximately 4.1 gpm during the days of normal operation.
[VIEW DOCS]	Operations and Maintenance Report	10/9/2008	Report is prepared to comply with Water Board's NPDES permit requirements. No significant issues noted.
[VIEW DOCS]	September 2008 Monthly Report	10/8/2008	Report discusses activities conducted during September 2008; proposed for October 2008 and projected for November 2008.
[VIEW DOCS]	Risk Assessment Workplan	10/6/2008	Work plan approved with comments to be addressed in the PHERA Report.
[VIEW DOCS]	August Monthly Status Report	9/5/2008	August 2008 Monthly Status Report accepted.
[VIEW DOCS]	July 2008 Monthly Report	8/12/2008	Monthly status report accepted.
[VIEW DOCS]	June 2008 Monthly Report	7/15/2008	Report accepted.
[VIEW DOCS]	Monitoring Report	7/11/2008	In addition to coordinating groundwater monitoring events with the adjacent South Bayfront site, DTSC has asked that Sherwin-Williams incorporate South Bayfront data in its figures. These figures will be submitted under separate cover.
[VIEW DOCS]	May 2008 Monthly Report	6/6/2008	Report accepted.
[VIEW DOCS]	April 2008 Monthly Report	5/7/2008	Monthly report accepted.

[VIEW DOCS]	Technical Workplan	4/23/2008	Workplan was approved for implementation with modifications.
[VIEW DOCS]	Technical Workplan	4/23/2008	Workplan will install 12 borings to provide additional lithologic description around areas being considered for slurry wall breaches, conduct a B-Zone pump test to gather data for potential dewatering, and collect soil samples for waste treatment facilities. The workplan was approved with modifications. Work will start April 29, 2008.
[VIEW DOCS]	March 2008 Monthly Report	4/9/2008	March 2008 Monthly Report accepted.
[VIEW DOCS]	Fact Sheets	3/19/2008	Final fact sheet sent to RP's consultant for distribution.
[VIEW DOCS]	Treatability Study Report	3/18/2008	DTSC has no comments on this document; document accepted.
[VIEW DOCS]	February 2008 Monthly Report	3/11/2008	Monthly report accepted with one modification. The report should reflect the abandonment of three groundwater monitoring wells on UPRR Parcel D property in March 2008 and the proposed soil borings and Groundwater Zone B pump test that may begin in late-March/early-April.
[VIEW DOCS]	Treatability Study Report	2/26/2008	DTSC approved finalizing this report on 2/11/2008. Final report received 2/26/2008.
[VIEW DOCS]	Treatability Study Report	2/26/2008	DTSC approved finalizing reports on 2/11/2008. Final documents received 2/26/2008.
[VIEW DOCS]	January 2008 Monthly Summary Report	2/7/2008	Report accepted.
[VIEW DOCS]	Monitoring Report	1/30/2008	Report accepted. Groundwater extraction system was shutdown 8/15/2007 and treatment system was shutdown on 8/22/2007 to accomodate building demolition activities. System was brought back on-line 12/3/2007, with full normal operation beginning 12/7/2007.
[VIEW DOCS]	Treatability Study Report	1/29/2008	Comments on the report adequately addressed; no additional comment/response exchange or further revision to the report required.
[VIEW DOCS]	December 2007 Monthly Status Report	1/11/2008	December 2007 Monthly Status Report received.
[VIEW DOCS]	*Correspondence - Received	12/17/2007	Letter notifying DTSC that the groundwater extraction and treatment system was successfully restarted and became fully operational as of December 7, 2007. The groundwater extraction and treatment system was offline for approximately 15 weeks to allow for demolition of several onsite structures. No cahnges were made to the treatment system. There is a new layout for the conveyance lines.
[VIEW DOCS]	Monitoring Report	12/14/2007	DTSC received document on 12/14/2007. Report documents groundwater level measurements conducted at the former Rifkin property on Friday, November 9, 2007 and groundwater level measurements collected at piezometers on 10/26/2007 through 11/15/2007.
[VIEW DOCS]	Monitoring Report	12/14/2007	DTSC received the report on 12/14/2007. The report documents the results of depth to groundwater monitoring conducted at the former Rifkin property on Friday, October 12, 2007 and weekly groundwater level monitoring conducted at site piezometers from 9/28/2007 through 10/19/2007.
[VIEW DOCS]	November 2007 Monthly Status Report	12/11/2007	Report accepted.
[VIEW DOCS]	October 2007 Monthly Report	11/6/2007	Report accepted. Additional public participation activities are being discussed.
	Fieldwork	10/17/2007	Semiannual groundwater monitoring event completed.
[VIEW DOCS]	September 2007 Monthly Report	10/4/2007	Monthly Report discusses ongoing temporary shutdown of the GWETS and demolition activities.
[VIEW DOCS]	Treatability Study Report	9/24/2007	Report presents results of the Phase III Grout Injection Pilot Test but does not interpret results. Interpretation will be provided in Feasibility Study Report.
[VIEW DOCS]	August 2007 Monthly Summary Report	9/5/2007	August 2007 Monthly Summary Report submitted and accepted.
[VIEW DOCS]	Fact Sheets	8/29/2007	DTSC sent final copy of the fact sheet and mailing list to consultant to mail out. Consultant mailed out fact sheet on 9/4 and DTSC received on 9/5.
[VIEW DOCS]	July 2007 Monthly Summary Report	7/30/2007	July 2007 Monthly Summary Report accepted.
[VIEW DOCS]	June 2007 Monthly Summary Report	6/29/2007	Monthly summary report accepted
[VIEW DOCS]	Public Participation Plan / Community Relations Plan	6/29/2007	Public Participation Specialist signed the Public Participation Plan.
	Treatability Study		The study found that the vast majority of the arsenic within the site soils is bound within amorphous silica. Therefore, the mobility of arsenic in the soils will be controlled by the

[VIEW DOCS]	Report	6/28/2007	stability of the amorphous silica. Amorphous silica becomes unstable (the solubility increases) at pH values above about 9-10.
[VIEW DOCS]	Treatability Study Workplan	6/28/2007	Workplan outlines which materials will be further tested in column tests as described in the initial treatability study workplan.
[VIEW DOCS]	Monitoring Report	5/22/2007	Report adequately documents groundwater sounding event conducted during the first quarter 2007. Groundwater sampling occurred in April 2007.
[VIEW DOCS]	April 2007 Monthly Status Report	5/4/2007	
	Fieldwork	4/20/2007	Sounding event completed.
[VIEW DOCS]	Technical Report	4/12/2007	Report indicates that further study is necessary in the next Phase to evaluate arsenic within the amorphous silica matrix within the groundwater table.
[VIEW DOCS]	Technical Report	3/19/2007	Report discusses the laboratory bench scale testing conducted to determine an appropriate grout mixture for pilot testing insitu injection in Phase III.
[VIEW DOCS]	February 2007 Monthly Status Report	3/2/2007	Report accepted; no significant comments
[VIEW DOCS]	Technical Report	3/1/2007	No comments on document. The information gathered will be evaluated as part of the feasibility study and the monitoring well will be incorporated into the groundwater monitoring program for the Site.
[VIEW DOCS]	Technical Report	3/1/2007	No comments on document. Information gathered will be evaluated as part of the feasibility study.
[VIEW DOCS]	January 2007 Monthly Report	2/5/2007	Report accepted.
[VIEW DOCS]	Monitoring Report	1/30/2007	Report adequate.
[VIEW DOCS]	Feasibility Study Workplan	1/16/2007	FS Workplan approved with modifications and comments to be addressed in the FS Report.
[VIEW DOCS]	December 2006 Monthly Report	1/8/2007	Report accepted.
[VIEW DOCS]	Treatability Study Workplan	12/19/2006	Workplan approved with modifications. Field work will begin 12/14/2006.
[VIEW DOCS]	November 2006 Monthly Status Report	12/1/2006	Report accepted
	Fieldwork	11/30/2006	Monitoring well installed 11/28/06; soil vapor samples collected 11/29/06 and 11/30/06.
[VIEW DOCS]	Fact Sheets	11/17/2006	Work Notice approved for distribution.
[VIEW DOCS]	Technical Report	11/15/2006	Approved report. One additional monitoring well will be installed.
[VIEW DOCS]	Remedial Investigation Workplan	11/14/2006	Soil vapor sampling work plan approved with modifications. Work scheduled for week of 11/27.
[VIEW DOCS]	October 2006 Monthly Status Report	10/30/2006	Monthly Status Report
[VIEW DOCS]	Monitoring Report	10/30/2006	Report accepted.
[VIEW DOCS]	September Monthly Status Report	9/29/2006	Report submitted by Sherwin-Williams
[VIEW DOCS]	August 2006 Monthly Status Report	9/5/2006	Report accepted.
[VIEW DOCS]	Monitoring Plan	8/22/2006	Groundwater monitoring plan amended and approved.
[VIEW DOCS]	July 2006 Monthly Report	8/4/2006	Report accepted
[VIEW DOCS]	Monitoring Report	7/28/2006	Report accepted. Addresses quarterly period from April 1 to June 30, 2006.
[VIEW DOCS]	June 2006 Monthly Status Report	7/5/2006	Monthly Progress report submitted.
[VIEW DOCS]	Monitoring Report	6/27/2006	Report accepted, no significant comments.
[VIEW DOCS]	Unilateral Order (I/SE, RAO, CAO, EPA AO)	5/10/2006	
[VIEW DOCS]	April 2006 Monthly Report	5/1/2006	Monthly report has been submitted
[VIEW DOCS]	Fact Sheets	4/28/2006	FactSheet issued that identified DTSC as the new regulatory lead agency. It includes a community survey for the project.
[VIEW DOCS]	March 2006 Monthly Report	4/3/2006	Submitted via electronic mail
[VIEW DOCS]	February 2006 Monthly Activities	3/2/2006	This report is submitted in accordance with a SFRWQCB order.

	Summary Report		
[VIEW DOCS]	AB 2061 - Designation	2/23/2006	Site Designation Committee transferred lead agency status to DTSC due to changes in site conditions and proposed reuse.
[VIEW DOCS]	January 2006 Status Report	2/1/2006	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	Operations and Maintenance Report	1/31/2006	This report was submitted to the San Francisco Regional Water Quality Control Board.
[VIEW DOCS]	Fact Sheets	1/13/2006	This fact sheet was issued by the San Francisco Regional Water Quality Control Board.
[VIEW DOCS]	December 2005 Status Report	1/5/2006	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	Risk Assessment Report	12/23/2005	Water Board approved the Human Health Risk Assessment.
[VIEW DOCS]	November 2005 Status Report	11/30/2005	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	October 2005 Status Report	11/2/2005	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	Operations and Maintenance Report	10/31/2005	This report was submitted to the San Francisco Regional Water Quality Control Board.
[VIEW DOCS]	September 2005 Status Report	9/30/2005	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	August 2005 Status Report	9/1/2005	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	July 2005 Status Report	7/29/2005	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	Operations and Maintenance Report	7/29/2005	This report was submitted to the San Francisco Regional Water Quality Control Board.
[VIEW DOCS]	June 2005 Status Report	6/29/2005	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	May 2005 Status Report	5/2/2005	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	April 2005 Status Report	5/2/2005	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	Operations and Maintenance Report	4/29/2005	.
[VIEW DOCS]	Remedial Investigation Report	4/19/2005	Report submitted to the Water Board as per their Order requirements.
[VIEW DOCS]	March 2005 Status Report	3/29/2005	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	February 2005 Status Report	3/1/2005	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	Public Participation Plan / Community Relations Plan	2/28/2005	Document submitted to Water Board per their Order requirements
[VIEW DOCS]	January 2005 Status Report	1/27/2005	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	December 2004 Status Report	12/29/2004	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	November 2004 Status Report	12/1/2004	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	October 2004 Status Report	11/1/2004	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	Operations and Maintenance Report	10/31/2004	This report was submitted to the San Francisco Regional Water Quality Control Board.
[VIEW DOCS]	September 2004 Status Report	10/1/2004	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
[VIEW DOCS]	August 2004 Status Report	8/30/2004	
[VIEW DOCS]	Operations and Maintenance Report	7/30/2004	
[VIEW DOCS]	July 2004 Status Report	7/27/2004	
[VIEW DOCS]	May 2004 Status Report	6/14/2004	This report was submitted to the San Francisco Regional Water Quality Control Board as required by their order.
	Operations and		This report was submitted to the San Francisco Regional Water Quality Control Board

[VIEW DOCS]	Maintenance Report	4/30/2004	as required by their order.
[VIEW DOCS]	Operations and Maintenance Report	1/31/2004	This report was submitted to the San Francisco Regional Water Quality Control Board.
[VIEW DOCS]	Operations and Maintenance Report	10/31/2003	This report was submitted to the San Francisco Regional Water Quality Control Board.
[VIEW DOCS]	Operations and Maintenance Report	7/31/2003	This report was submitted to the San Francisco Regional Water Quality Control Board.
[VIEW DOCS]	Operations and Maintenance Report	4/30/2003	This report was submitted to the San Francisco Regional Water Quality Control Board.
[VIEW DOCS]	Remedial Investigation Report	10/21/2002	RI Report approved by the Water Board, administering agency for the Site.
[VIEW DOCS]	Fact Sheets	5/29/2002	SF Bay Regional Water Board's Fact Sheet Announcing the Public Comment Period for the Remedial Investigation Report. Public comment period ran from 4/2/2002 to 5/2/2002.
[VIEW DOCS]	Technical Report	3/5/1999	This work was done under the oversight of the SFRWQCB.
[VIEW DOCS]	Public Participation Plan / Community Relations Plan	6/30/1998	Document submitted to the Water Board per their Order requirements.
[VIEW DOCS]	Unilateral Order (I/SE, RAO, CAO, EPA AO)	2/18/1998	San Francisco RWQCB issued a cleanup and abatement Order. DTSC will participate in a Consultative Workgroup that the Board will convene.
[VIEW DOCS]	AB 2061 - Designation	7/31/1997	San Francisco RWQCB has been named lead for this project.
[VIEW DOCS]	CHIRON Preliminary Development Plan - June 1996	6/7/1996	Document submitted to the City of Emeryville.
[VIEW DOCS]	Interim Remedial Measures	4/19/1996	This work was done under the oversight of the SFRWQCB.
[VIEW DOCS]	Tank Removal Report	9/29/1994	Report documents the removal of four buried approximately 6,500 gallon steel rail cars containing Bunker C. These four rail cars were removed between July 25, 1994 and August 5, 1994 under the oversight of the Emeryville Fire Department and Alameda County Environmental Health Department.

GEOTRACKER CASES ASSOCIATED WITH THIS ENVIROSTOR PROJECT

GEOTRACKER PROJECT NAME	STATUS	ADDRESS	CITY
RIFKIN INVESTMENT COMPANY	Open - Site Assessment	HORTON STREET	Emeryville
SHERWIN-WILLIAMS CO	Open - Remediation	SHERWIN AVE	EMERYVILLE

Conditions of Use | Privacy Policy

Copyright © 2007 Department of Toxic Substances Control

0.265625 seconds

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Barbara A. Lee, Director
700 Heinz Avenue
Berkeley, California 94710-2721

Edmund G. Brown Jr.
Governor

January 8, 2015

Mr. Larry Mencin
The Sherwin-Williams Company
101 Prospect Avenue
N.W. Cleveland, Ohio 44115-1075

Dear Mr. Mencin:

The Department of Toxic Substances Control (DTSC) has reviewed the Data Summary Report for Groundwater Monitoring Activities for the Period from July 1, 2014 through December 31, 2014, for the Sherwin-Williams Site, dated January 8, 2015. It is hereby approved.

If you have any questions, please feel free to contact me at Juanita.bacey@dtsc.ca.gov or (510) 540-2480.

Sincerely,

Nina Bacey, Project Manager
Brownfields and Environmental Restoration Program

cc: Pawan K. Sharma, P.E.
CDM (via email)
SharmaPK@cdmsmith.com

Printed on Recycled Paper

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
ENVIROSTOR

UPRR PARCEL D (60000833)

SIGN UP FOR EMAIL ALERTS

NORTH OF SHERWIN AVENUE AND HALLECK STREET
EMERYVILLE, CA 94608
ALAMEDA COUNTY
SITE TYPE: VOLUNTARY CLEANUP

OFFICE: CLEANUP BERKELEY

Site Information

CLEANUP STATUS
REFER: OTHER AGENCY AS OF 12/28/2007

SITE TYPE:	VOLUNTARY CLEANUP	**ENVIROSTOR ID:**	60000833
NATIONAL PRIORITIES LIST:	NO	**SITE CODE:**	201773
ACRES:	2 ACRES	**SPECIAL PROGRAM:**	
APN:	NONE SPECIFIED	**FUNDING:**	SITE PROPONENT
CLEANUP OVERSIGHT AGENCIES:		**ASSEMBLY DISTRICT:**	15
DTSC - SITE CLEANUP PROGRAM - LEAD		**SENATE DISTRICT:**	09

Regulatory Profile

PAST USE(S) THAT CAUSED CONTAMINATION
NONE SPECIFIED

POTENTIAL CONTAMINANTS OF CONCERN
NONE SPECIFIED

POTENTIAL MEDIA AFFECTED
NONE SPECIFIED

Site History

Site is a vacant parcel located to the north of the intersection of Sherwin Avenue and Halleck Street in Emeryville, California. The Site is bounded by the Sherwin-Williams Site on the east and north, Union Pacific Railroad tracks on the west, and the southern edge of Sherwin Avenue on the South. It incorporates the Technichem facility's Solid Waste Management Unit #6 on the southwest corner of the Site adjacent to the building that formerly housed Technichem. The City of Emeryville is preparing the Site for redevelopment. Under the MOA between the City of Emeryville, DTSC and the Water Board, the City provided oversight for the Redevelopment Agency's site characterzation activities and development of a Final Cleanup Plan for the Site.

Conditions of Use | Privacy Policy

Copyright © 2007 Department of Toxic Substances Control

0.046875 seconds

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
ENVIROSTOR

PACIFIC GAS & ELECTRIC CO- EMERYVILLE (01490011)

SIGN UP FOR EMAIL ALERTS

4525 HOLLIS STREET
EMERYVILLE, CA 94608
ALAMEDA COUNTY
SITE TYPE: VOLUNTARY CLEANUP

PROJECT MANAGER: HOMAYUNE ATIQEE
SUPERVISOR: KAREN TOTH
OFFICE: CLEANUP BERKELEY
PUBLIC PARTICIPATION SPECIALIST: NATHAN SCHUMACHER
PRESS CONTACT: SANDY NAX

Site Information

CLEANUP STATUS
ACTIVE AS OF 11/21/2008

SITE TYPE: VOLUNTARY CLEANUP
NATIONAL PRIORITIES LIST: NO
ACRES: 15.1 ACRES
APN: 049 104107002, 49-1032-13, 49-1032-14, 49-1041-29-1, 49-1041-29-2, 49-1041-61, 49-1041-70-2, 49-1041-71-2
CLEANUP OVERSIGHT AGENCIES:
ALAMEDA COUNTY
DTSC - SITE CLEANUP PROGRAM - LEAD

ENVIROSTOR ID: 01490011
SITE CODE: 201830
SPECIAL PROGRAM: VOLUNTARY CLEANUP PROGRAM
FUNDING: SITE PROPONENT
ASSEMBLY DISTRICT: 15
SENATE DISTRICT: 09

Regulatory Profile

PAST USE(S) THAT CAUSED CONTAMINATION
EQUIPMENT/INSTRUMENT REPAIR, TRANSFORMER REPAIR

POTENTIAL CONTAMINANTS OF CONCERN
ARSENIC
LEAD
POLYCHLORINATED BIPHENYLS (PCBS)
TPH-DIESEL
TPH-MOTOR OIL

POTENTIAL MEDIA AFFECTED
SOIL

Site History

This site, which has been in operation since the early 1920s, historically served as a PG&E Materials Distribution Center. The site has served as a warehouse, repair shop and storage yard for transformers, capacitors, and other electrical supplies. The portion of the Materials Distribution Center north of 53rd Street was purchased by Chiron Corporation in the early 1990's and is now utilized by Chiron's successor, Novartis.

The former Southern Pacific Right-of-Way was located adjacent to PG&E's Materials Distribution Center. The section of the former Right-of-Way north of 53rd Street is currently owned by Novartis Corporation, and the section south of 53rd Street is owned by Wareham Development.

Land Use Restrictions

DISCLAIMER: The land use restrictions listed under the site management requirements are only an abbreviated summary of the land use restrictions, and may not encompass all restrictions and notification requirements placed on a property. For complete land use restriction information please see the Land Use Restriction document by, clicking on the "VIEW COVENANT" link.

	AREA	SUB-AREA	DATE RECORDED	SITE MANAGEMENT REQUIREMENTS
[VIEW COVENANT]	CHIRON/NOVARTIS PROPERTY	RAMP AREA	8/26/1998	• LAND USE COVENANT • NO GROUNDWATER EXTRACTION AT ANY DEPTH WITHOUT APPROVAL • RESIDENCE USE PROHIBITED • HOSPITAL USE PROHIBITED • PUBLIC OR PRIVATE SCHOOL FOR PERSONS UNDER

21 PROHIBITED
- NOTIFY AFTER CHANGE OF PROPERTY OWNER
- NO OIL OR GAS EXTRACTION AT ANY DEPTH
- ELDER CARE CENTER PROHIBITED

Future Activities

NOTE: THE DUE DATES OF FUTURE ACTIVITIES ARE SUBJECT TO CHANGE BASED ON THE PROGRESS OF CURRENTLY SCHEDULED ACTIVITIES

AREA NAME	SUB-AREA	DOCUMENT TYPE	DUE DATE
Materials Facility		Public Notice	2015
Materials Facility		Fact Sheets	2015
Materials Facility		CEQA - Notice of Exemption	2015
Materials Facility		Removal Action Workplan	2015

Completed Activities

	AREA NAME	SUB-AREA	DOCUMENT TYPE	DATE COMPLETED	COMMENTS
[VIEW DOCS]	Chiron/Novartis Property		Annual Oversight Cost Estimate	9/25/2014	annual cost estimate mailed out to property owner.
[VIEW DOCS]	Materials Facility		Annual Oversight Cost Estimate	9/22/2014	Annual cost estimate sent to proponent.
[VIEW DOCS]	Materials Facility		Amendment - Order/Agreement	9/4/2014	Amendment #1 to the VCA has been fully-executed. Additional tasks were added to the scope of work.
[VIEW DOCS]	Materials Facility		Community Profile	8/27/2014	Community profile for the site approved.
[VIEW DOCS]	Materials Facility		Risk Assessment Report	7/15/2014	Baseline risk assessment approved.
	Materials Facility	Building A Area	Fieldwork	6/17/2014	Quarterly groundwater monitoring performed at the site.
	Materials Facility	Building A Area	Fieldwork	3/14/2014	Quarterly groundwater monitoring of the wells near Building A was performed.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	* Land Use Restriction Monitoring Report	2/19/2014	
[VIEW DOCS]	Materials Facility	Building A Area	Fact Sheets	1/31/2014	Fact sheet updating the community on the status of the site investigation and remediation was mailed out.
[VIEW DOCS]	Materials Facility	Building A Area	Well Completion Report	12/26/2013	DTSC has approved the report documenting the installation of monitoring wells MW-1, MW-1S, and MW-2.
	Materials Facility	Building A Area	Fieldwork	12/15/2013	Quarterly groundwater monitoring of the Building A monitoring wells.
[VIEW DOCS]	Chiron/Novartis Property		Annual Oversight Cost Estimate	10/25/2013	Annual cost estimate sent to responsible party.
[VIEW DOCS]	Materials Facility		Annual Oversight Cost Estimate	10/18/2013	Annual DTSC oversight cost estimate mailed to proponent.
	Materials Facility	Building A Area	Fieldwork	9/13/2013	Additional groundwater monitoring wells installed and sampled.
[VIEW DOCS]	Materials Facility	Building A Area	Well Installation Workplan	8/30/2013	Workplan for installation of three groundwater monitoring wells in Holden Street approved by DTSC.
[VIEW DOCS]	Materials Facility	Building A Area	Work Notice	8/27/2013	Work Notice for additional well installation near Building A approved and mailed out.
[VIEW DOCS]	Materials Facility	Building A Area	Risk Assessment Report	7/31/2013	DTSC has approved the offsite indoor air risk evaluation. The risk evaluation concluded that under current site conditions, there was no significant indoor air risk to nearby residents and workers.
[VIEW DOCS]	Materials Facility		Site Characterization Report	7/16/2013	DTSC has approved the site investigation addendum report, which documents the results of additional soil and groundwater sampling in the Building A area and along the historical insulating oil pipeline.
[VIEW DOCS]	Materials Facility		Site Characterization Report	5/2/2013	DTSC has approved the supplemental report, which documents the results of sampling performed at the site in 2011.
	Materials				

	Facility		Fieldwork	3/15/2013	Additional groundwater investigation performed at the site.
[VIEW DOCS]	Materials Facility		Work Notice	2/25/2013	Work notice informing the community of additional soil and groundwater sampling at the site was finalized.
[VIEW DOCS]	Materials Facility		Site Characterization Workplan	2/14/2013	Workplan for additional groundwater investigation in the Building A area and along the historical mineral oil pipeline.
[VIEW DOCS]	Chiron/Novartis Property		5 Year Review Reports	12/10/2012	Five-Year review completed for the Restricted Excavation Area located on Novartis property in Emeryville. The five-year review concluded that the remedy selected for the site, capping and institutional controls, remained protective of public health and the environment.
[VIEW DOCS]	Materials Facility		Annual Oversight Cost Estimate	10/30/2012	Annual DTSC oversight cost estimate mailed to project proponent.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Annual Oversight Cost Estimate	10/30/2012	Annual DTSC oversight cost estimate mailed to responsible party.
	Materials Facility	Building A Area	Fieldwork	9/28/2012	Supplemental soil vapor sampling performed at the site.
[VIEW DOCS]	Materials Facility	Building A Area	Work Notice	9/21/2012	Work notice mailed out for additional soil gas sampling in the Building A area.
	Materials Facility	Building A Area	Fieldwork	6/18/2012	Resampling of current soil vapor wells along Holden St. and installation of two new vapor wells was performed.
[VIEW DOCS]	Materials Facility		Risk Assessment Workplan	6/14/2012	Workplan for the site wide baseline risk assessment approved by DTSC.
[VIEW DOCS]	Materials Facility	Building A Area	Work Notice	6/6/2012	Work notice for supplemental soil vapor sampling approved by DTSC.
	Materials Facility	Building A Area	Fieldwork	11/9/2011	Soil gas, hydropunch, and monitoring well sampling completed in and downgradient of Building A.
[VIEW DOCS]	Chiron/Novartis Property		* Land Use Restriction Monitoring Report	11/7/2011	
[VIEW DOCS]	Materials Facility		Work Notice	10/18/2011	Work notice for offsite soil gas and groundwater sampling mailed out.
[VIEW DOCS]	Materials Facility		Annual Oversight Cost Estimate	10/13/2011	annual cost estimate for fiscal year 2011-12 finalized.
	Materials Facility		Fieldwork	4/1/2011	Fieldwork during the supplemental investigation consisted of soil, groundwater, and soil gas sampling.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	* Land Use Restriction Monitoring Report	1/4/2011	
[VIEW DOCS]	Materials Facility		Remedial Investigation Workplan	9/27/2010	DTSC has approved the "Revised Additional Site Investigation Workplan" for the PG&E Emervyile Materials Facility. The workplan proposes additional soil, groundwater, and soil gas investigation at the site in order to address data gaps that exist at the site.
[VIEW DOCS]	Materials Facility		Annual Oversight Cost Estimate	8/26/2010	Annual cost estimate for DTSC oversight for the fiscal year 2010-11.
[VIEW DOCS]	Materials Facility		Site Characterization Report	5/18/2010	
[VIEW DOCS]	Materials Facility		Voluntary Cleanup Agreement	12/21/2009	VCA for the PG&E Materials Facility fully executed.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Land Use Restriction - Site Inspection/Visit	12/3/2009	DTSC inspected the portions of the asphalt parking lot, landscaped areas, sidewalk and Chiron Way that comprise the Restricted Excavation Area. The area appeared to be in good condition, with no visible signs of significant cracking or damage.
[VIEW DOCS]	Materials Facility		De-Certification	1/14/2009	PG&E Materials Facility decertified. A recent investigation on the property by PG&E discovered elevated levels of contaminants in soil. DTSC will negotiate a VCA with PG&E to investigate and remediate the property.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Land Use Restriction - Site Inspection/Visit	12/8/2008	The Restricted Excavation Area appeared to be in good condition, with no visible signs of significant cracking or damage.
	Chiron/Novartis	Ramp	5 Year Review		

[VIEW DOCS]	Property	Area	Reports	11/30/2007	Finalized five year review.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Land Use Restriction - Site Inspection/Visit	6/13/2006	
[VIEW DOCS]	Chiron/Novartis Property		Notification of Change of Ownership	5/17/2006	Letter notified DTSC that the company had changed ownership and was now known as Novartis Vaccines and Diagnostics.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	5 Year Review Reports	4/5/2002	
[VIEW DOCS]	Materials Facility		Tank Removal Report	1/1/2001	Report submitted to Alameda County for review and approval from PG&E. However, this report was never officially approved by the County.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Certification	11/14/1998	Certified Site.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Land Use Restriction	8/26/1998	Recorded Deed Restriction.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Removal Action Completion Report	11/6/1996	Removal Action completed. Chiron excavated over 7100 cubic yards of soils containing PCBs which were hauled offsite for disposal.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	CEQA - Responsible Agency Review	7/31/1996	
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Removal Action Workplan	7/31/1996	Removal Action Workplan (RAW) approved for excavation of contaminated soils. A Deed Restriction was also required.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Community Profile	7/1/1996	Community Profile Approved
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Public Notice	6/26/1996	Public Notice placed in Oakland Tribune
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Fact Sheets	6/25/1996	Fact Sheet for proposed excavation of PCB contaminated soils
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Voluntary Cleanup Agreement	4/1/1996	Voluntary Cleanup Agreement with Chiron Corporation (property owner) for characterization and cleanup.
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Health & Safety Plan	3/27/1996	HASP
	Chiron/Novartis Property		De-Certification	1/1/1995	Decertified Site. In 1994, while constructing a temporary parking lot, an additional area of soil with PCB contamination was discovered.
[VIEW DOCS]	Chiron/Novartis Property	Southern Pacific Right-Of-Way	Site Screening	10/15/1989	Site screening performed.
[VIEW DOCS]	PROJECT WIDE		Certification	6/30/1989	Certified Site. Between July 1987 and June 1989, approximately 400 cubic yards of PCB contaminated soils were removed.
	PROJECT WIDE		Site Screening	3/24/1987	Site Screening completed. Sampling conducted in 1983 and 1984 showed elevated levels of polychlorinated biphenyls (PCBs). These soils were excavated and disposed offsite in 1986. Confirmation sampling showed these areas had been cleaned. Additional sampling in 1986 showed elevated levels of PCBs in one area, but since it was capped, no further action was recommended. In 1987, an oil-stained area was found to contain elevated levels of PCBs. Additional samples to determine the extent of the contamination were taken.

Community Involvement Documents

FACT SHEETS HIDE DOCUMENTS > 1 YEAR OLD

	OU NAME	AREA	DOCUMENT TITLE	DOCUMENT TYPE	DOCUMENT DATE
[VIEW DOCS]	Materials Facility	Building A Area	Status of Building A Investigation and Cleanup Fact Sheet	Fact Sheet	1/31/2014
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Fact Sheet for Draft Removal Action Workplan	Fact Sheet	6/25/1996

UPDATES AND INFORMATION HIDE DOCUMENTS > 1 YEAR OLD

	OU NAME	AREA	DOCUMENT TITLE	DOCUMENT TYPE	DOCUMENT DATE
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Public Notice for Draft Removal Action Workplan	Public Notice	6/26/1996

PROJECT RELATED DOCUMENTS HIDE DOCUMENTS > 1 YEAR OLD

	OU NAME	AREA	DOCUMENT TITLE	DOCUMENT TYPE	DOCUMENT DATE
[VIEW DOCS]	Materials Facility		Community Profile	Community Profile	8/27/2014
[VIEW DOCS]	Chiron/Novartis Property	Ramp Area	Community Profile For Chiron Voluntary Cleanup	Community Profile	7/1/1996

Conditions of Use | Privacy Policy

Copyright © 2007 Department of Toxic Substances Control

0.2890625 seconds

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
ENVIROSTOR

TECHNICHEM INC (80001769)

SIGN UP FOR EMAIL ALERTS

4245 HALLECK ST
EMERYVILLE, CA 946080000
ALAMEDA COUNTY
SITE TYPE: CORRECTIVE ACTION

PROJECT MANAGER: JUANITA (NINA) BACEY
SUPERVISOR: KAREN TOTH
OFFICE: CLEANUP BERKELEY
PRESS CONTACT: RUSS EDMONDSON

Site Information

CLEANUP STATUS
ACTIVE AS OF 1/1/2008

SITE TYPE: CORRECTIVE ACTION
NATIONAL PRIORITIES LIST: NO
ACRES: 0.35 ACRES
APN: 009-0695-006-00, 049 103600200
CLEANUP OVERSIGHT AGENCIES:
DTSC - SITE CLEANUP PROGRAM - LEAD

ENVIROSTOR ID: 80001769
SITE CODE: 200314
SPECIAL PROGRAM:
FUNDING: ORPHAN FUNDS
ASSEMBLY DISTRICT: 15
SENATE DISTRICT: 09

Regulatory Profile

PAST USE(S) THAT CAUSED CONTAMINATION
HAZARDOUS WASTE STORAGE - TANKS/CONTAINERS, HAZARDOUS WASTE TREATMENT, WASTE - INDUSTRIAL TREATMENT FACILITY

POTENTIAL CONTAMINANTS OF CONCERN
TETRACHLOROETHYLENE (PCE)
TRICHLOROETHYLENE (TCE)
VINYL CHLORIDE

POTENTIAL MEDIA AFFECTED
INDOOR AIR, OTHER GROUNDWATER AFFECTED (USES OTHER THAN DRINKING WATER), SOIL, SOIL VAPOR

Site History

STATE RESPONSE BACKGROUND: In 1987, Technichem, Incorporated (Technichem) leased and moved into a potion of the 4245 Halleck Street building. The DTSC issued a Resource Recovery Facility Permit to Technichem on January 22, 1987 for their new PCE recycling process. Technichem removed residual perchloroethylene (PCE) from spent dry cleaning filter cartridges, degreasing processes, still oil, and wastewater. Their process provided a way to recycle the PCE so that the filters could be disposed of or recycled and the reclaimed PCE - resold. Technichem operated at the Site until December 2003. The Technichem portion of the building is vacant. Soil, soil vapor, and groundwater sampling at the Site indicates that the Site has been impacted by PCE from the Technichem operation.

CORRECTIVE ACTION BACKGROUND: In 1993, the Department of Toxic Substances Control (DTSC) performed a RCRA Facility Assessment (RFA) at the Technichem facility. In 2003, the City of Emeryville performed soil sampling in the Technichem facility, which was followed up by a Facility Closure Passive Soil Gas Investigation Workplan performed by PES Environmental in May, 2005. This workplan broke down the area of the Facility into six Solid Waste Management Units (SWMUs) and two Areas of Concern (AOC) that either released or may have released hazardous waste or hazardous waste constituents into the environment. Based on the reports submitted to date, DTSC concludes that further investigation is needed to determine the nature and extent of any release of hazardous waste or hazardous waste constituents in all six SWMUs and both AOCs. The SWMUs and AOCs include the Process Room (SWMU 1), the Tank Storage Area (SWMU 2), the Wastewater Treatment Area (SWMU 3), the Hazardous Waste Drum Storage Area (SWMU 4), the Distillation Unit (SWMU 5), the Outside Storage Area (SWMU 6), the Recycled PCE Storage Areas (AOC 1), and the Laboratory (AOC 2). The hazardous waste and hazardous waste constituents of concern at the facility are numerous, but the concentrations of perchloroethylene are the driving force behind Corrective Action and future remediation. DTSC issued a I/SE consent order on August 11, 2008.

Completed Activities

	DOCUMENT TYPE	DATE COMPLETED	COMMENTS
[VIEW DOCS]	Judicial Order	4/30/2014	
[VIEW DOCS]	Correspondence	1/3/2014	
[VIEW DOCS]	Consent Decree	12/20/2013	
[VIEW DOCS]	Judicial Order	11/4/2013	
[VIEW DOCS]	Judicial Order	11/4/2013	
[VIEW DOCS]	Consent Decree	11/1/2013	
[VIEW DOCS]	Correspondence	10/3/2013	
[VIEW DOCS]	Consent Decree	9/4/2013	
[VIEW DOCS]	Consent Decree	7/24/2013	
[VIEW DOCS]	Judicial Order	7/3/2013	
[VIEW DOCS]	Monitoring Report	6/4/2013	PCE concentration in groundwater of 12,000 ug/L below center of building at depth of 15-25 ft bgs; addtional gw investigation proposed to further delineate the groundwater plume vertically and horizontally.
[VIEW DOCS]	Correspondence	4/11/2013	
	Fieldwork	3/20/2013	last gw sample collected 3/20
[VIEW DOCS]	Consent Settlement - Administrative	3/19/2013	Letters sent out in response to counter offers on deminimus settlements
[VIEW DOCS]	Technical Workplan	2/28/2013	workplan to install 1 well on site and sample it
[VIEW DOCS]	State/Federal Funded Site Work Order	2/6/2013	
[VIEW DOCS]	Judicial Order	1/22/2013	
[VIEW DOCS]	Judicial Order	1/17/2013	
[VIEW DOCS]	Technical Workplan	1/2/2013	
[VIEW DOCS]	Work Notice	12/17/2012	
[VIEW DOCS]	Correspondence	12/7/2012	Letters sent to milk-run generators with $6,000 settlemnt offers
[VIEW DOCS]	Judicial Order	11/14/2012	Complaint for cost recovery against Technichem & Pellegrini Trust
[VIEW DOCS]	State/Federal Funded Site Work Order	9/27/2012	
[VIEW DOCS]	State/Federal Funded Site Contract	9/25/2012	contract for GW monitoring
[VIEW DOCS]	Correspondence	9/4/2012	
[VIEW DOCS]	State/Federal Funded Site Contract Fiscal Approval (CFA)	7/30/2012	
[VIEW DOCS]	RFI Report	7/11/2012	
[VIEW DOCS]	Removal Action Completion Report	7/11/2012	
[VIEW DOCS]	Fieldwork	6/8/2012	
[VIEW DOCS]	RFI Workplan	5/16/2012	
	Fieldwork	5/11/2012	Excavation of contaminated soil completed.

[VIEW DOCS]	State/Federal Funded Site Work Order	5/1/2012	
[VIEW DOCS]	Correspondence	4/13/2012	
[VIEW DOCS]	Design/Implementation Workplan	3/23/2012	
[VIEW DOCS]	Work Notice	3/19/2012	
[VIEW DOCS]	Remedial Design - Preliminary/Intermediate	2/15/2012	Soil area to be excavated and engineering approach to do so is described in this report. Contractor will submit engineering workplan, then excavation will occur.
[VIEW DOCS]	Remedial Action Implementation Workplan	1/3/2012	Additional soil samples to be collected prior to excavation.
[VIEW DOCS]	Judicial Order	12/6/2011	
	Fieldwork	11/18/2011	
[VIEW DOCS]	Design/Implementation Workplan	10/14/2011	
[VIEW DOCS]	State/Federal Funded Site Contract	9/27/2011	
[VIEW DOCS]	Work Notice	9/12/2011	
[VIEW DOCS]	State/Federal Funded Site Contract Fiscal Approval (CFA)	8/23/2011	Extension of contract date; no $ added
[VIEW DOCS]	State/Federal Funded Site Contract	6/28/2011	
[VIEW DOCS]	State/Federal Funded Site Contract	6/23/2011	
[VIEW DOCS]	Correspondence	6/21/2011	work completed
[VIEW DOCS]	Removal Action Completion Report	5/24/2011	
[VIEW DOCS]	State/Federal Funded Site Contract Fiscal Approval (CFA)	5/23/2011	
[VIEW DOCS]	State/Federal Funded Site Contract	4/25/2011	contract extension to complete final report
[VIEW DOCS]	State/Federal Funded Site Contract Fiscal Approval (CFA)	4/7/2011	Expiration date extended to 5/30/2011.
[VIEW DOCS]	State/Federal Funded Site Contract	2/9/2011	start w.o. issued to draft final report
[VIEW DOCS]	State/Federal Funded Site Contract	1/13/2011	
[VIEW DOCS]	Correspondence	1/12/2011	
[VIEW DOCS]	State/Federal Funded Site Contract	12/17/2010	
[VIEW DOCS]	State/Federal Funded Site Contract	12/17/2010	funds added to current work order
	Fieldwork	12/17/2010	Soil excavation work completed
[VIEW DOCS]	State/Federal Funded Site Contract Fiscal Approval (CFA)	12/10/2010	Contract to write final report
[VIEW DOCS]	State/Federal Funded Site Contract Fiscal Approval (CFA)	11/10/2010	Funds added for additional expenses
[VIEW DOCS]	CEQA - Notice of Exemption	10/18/2010	No comments received on NOE.
[VIEW DOCS]	Interim Measures Workplan	10/18/2010	Interim measure to excavate PCE contaminated soil approved. Work to begin in October.
[VIEW DOCS]	Fact Sheets	9/7/2010	Comment period to run 9/15 to 10/15
[VIEW DOCS]	Public Notice	8/19/2010	Public Notice for Draft Interim Measures Workplan to excavated contaminated soil.
[VIEW DOCS]	RFI Report	7/8/2010	
[VIEW DOCS]	State/Federal Funded Site Contract Fiscal Approval (CFA)	6/24/2010	Signed CFA time extention to December 31, 2010
	Fieldwork	4/29/2010	Fieldwork.
[VIEW DOCS]	State/Federal Funded Site Contract	1/12/2010	Time Extention to June 30, 2010.
[VIEW DOCS]	State/Federal Funded Site Contract Fiscal Approval (CFA)	1/12/2010	Term date was extended from January 31, 2010 to June 30, 2010.
[VIEW DOCS]	State/Federal Funded Site Contract	4/10/2009	Work order for the hot spot removal. (08-T3602)
[VIEW DOCS]	State/Federal Funded Site Contract	3/27/2009	Executed on March 27, 2009 for the hot spot cleanup of soil at Technichem.
[VIEW DOCS]	Site Inspections/Visit (Non LUR)	1/27/2009	Site visit with Chris Mai of ERRG to estimate costs with the hot spot removal.
[VIEW DOCS]	State/Federal Funded Site Contract Fiscal Approval (CFA)	1/9/2009	CFA signed by Budgets 1/9/2009.
[VIEW DOCS]	Access Agreement	8/14/2008	Agreement signed.
[VIEW DOCS]	Unilateral Order (I/SE, RAO, CAO, EPA AO)	8/11/2008	
[VIEW DOCS]	Correspondence	3/5/2008	
[VIEW DOCS]	RFI Report	4/18/2007	
[VIEW DOCS]	RFI Report	6/19/2006	Passive Soil Gas Survey Report
[VIEW DOCS]	Consent Settlement - Administrative	12/17/2003	
[VIEW DOCS]	Consent Order	11/13/2002	
[VIEW DOCS]	RCRA Facility Assessment Report	6/30/1993	RCRA Facility Assessment Completed

Community Involvement Documents

DRAFT DOCUMENTS FOR REVIEW HIDE DOCUMENTS > 1 YEAR OLD

	DOCUMENT TITLE	DOCUMENT TYPE	DOCUMENT DATE
[VIEW DOCS]	Interim Measures Work Plan Former Technichem, Inc. Facility	Remedial Action Plan	9/8/2010
[VIEW DOCS]	Notice of Exemption	CEQA	9/8/2010

FACT SHEETS HIDE DOCUMENTS > 1 YEAR OLD

	DOCUMENT TITLE	DOCUMENT TYPE	DOCUMENT DATE
[VIEW DOCS]	Fact Sheet	Fact Sheet	9/7/2010

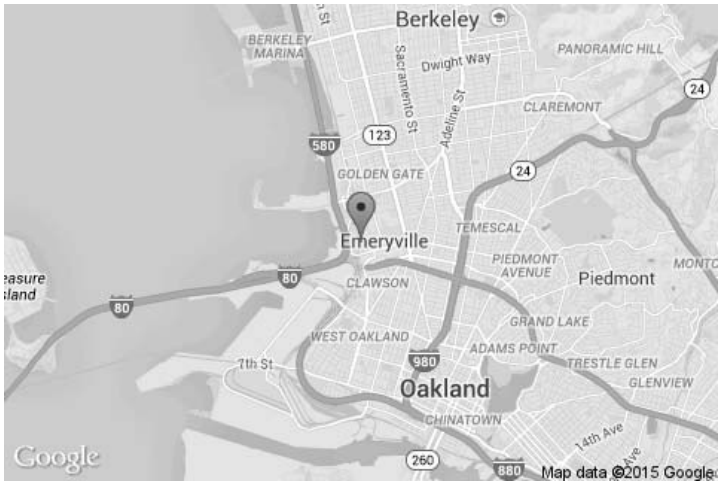
UPDATES AND INFORMATION HIDE DOCUMENTS > 1 YEAR OLD

	DOCUMENT TITLE	DOCUMENT TYPE	DOCUMENT DATE
[VIEW DOCS]	Public Notice	Public Notice	8/19/2010
[VIEW DOCS]	Legal Action Against Technichem	News Release	1/8/2004

SITES WITH NO OPERABLE UNIT

FOR AN INTERACTIVE MAP, CLICK ON AN IMAGE BELOW

OVERVIEW: **MAP VIEW:**





SATELLITE:



TERRAIN:



Conditions of Use | Privacy Policy

Copyright © 2007 Department of Toxic Substances Control

0.375 seconds

Erler & Kalinowski, Inc.

FINAL SITE CLEANUP PLAN

UPRR PARCEL D
Emeryville, California

EPA Project No. BF-0942801

March 2008

Prepared for:
City of Emeryville
Redevelopment Agency
Emeryville, California

Consulting engineers and scientists

Erler & Kalinowski, Inc.
Consulting Engineers and Scientists
1870 Ogden Drive
Burlingame, CA 94010
(650) 292-9100
Fax (650) 552-9012

18 March 2008

To Potential Recipients of Electronic Files:

Erler & Kalinowski, Inc. ("EKI") has provided our CLIENT, City of Emeryville Redevelopment Agency with paper copies of the Site Cleanup Plan for UPRR Parcel D in Emeryville, California, dated FINAL March 2008, prepared by EKI. An electronic copy of this report, including the text, tables, figures, and appendices, is provided per the request of the Department of Toxic Substances Control the San Francisco Bay Regional Water Quality Control Board in *.pdf (i.e., Adobe Acrobat) format.

These electronic files are being provided at the request of our CLIENT to fulfill requirements of the Department of Toxic Substances Control and the San Francisco Bay Regional Water Quality Control Board for electronic submittal of information, and for the convenience of our CLIENT. The delivery of electronic media by EKI does not constitute the delivery of our professional work product to others or provide rights of reliance by third parties. Only the original paper prints provided to, and for the sole benefit of, our CLIENT constitute EKI's professional work product. Because the electronic media may be damaged during transfer or altered, the paper prints shall control where there are any differences between the paper prints and the electronic media. EKI makes no warranties, either express or implied, of the merchantability, applicability, compatibility with the recipients' computer equipment or software; of the fitness for any particular purpose for the documents and electronic media; or that the electronic media contain no defects or are virus free.

Under no circumstances shall delivery or access to these electronic files be deemed a sale by EKI. This document and recipient's access to, or receipt of, EKI's work product or electronic files shall not create or imply any contractual relationship between EKI and recipient.

Reuse of EKI's work products by others or modification and use by others of any documents or electronic media prepared by EKI shall be at that party's sole risk. In no event shall EKI be liable for direct or consequential damages as a result of recipient's use, reuse, or modification of these electronic files. No third party reliance is intended or provided by submittal of electronic files by EKI in response to governmental agency requirements.

Sincerely,

ERLER & KALINOWSKI, INC.

Earl D. James, P.G.
Vice President

FINAL SITE CLEANUP PLAN

UPRR Parcel D
Emeryville, California

EPA Project No. BF-0942801

March 2008

Prepared for:

City of Emeryville
Redevelopment Agency
1333 Park Avenue
Emeryville, California

Prepared by:

Erler & Kalinowski, Inc.
1870 Ogden Drive
Burlingame, California

EKI A60021.00

Erler & Kalinowski, Inc.
Consulting Engineers and Scientists
1870 Ogden Drive
Burlingame, CA 94010
(650) 292-9100
Fax (650) 552-9012

18 March 2008

Michael G. Biddle, Esq.
City Attorney/Agency Counsel
City of Emeryville/Emeryville Redevelopment Agency
Office of the City Attorney
1333 Park Avenue
Emeryville, California 94608-3517

Subject: Final Site Cleanup Plan
UPRR Parcel D
Emeryville, California
(EKI A60021.00)

Dear Mr. Biddle:

Erler & Kalinowski, Inc. ("EKI") is pleased to present this final *Site Cleanup Plan* ("SCP") for the UPRR Parcel D site ("Site"), located at the intersection of Sherwin Street and Halleck Street in Emeryville, California. This work has been conducted in accordance with our agreement dated 12 September 2006 and our proposal dated 4 April 2007. EKI previously prepared the *Analysis of Brownfields Cleanup Alternatives* ("ABCA"), dated 27 November 2007 that described the nature and extent of contamination at the Site, remedial action objectives ("RAOs") and proposed preliminary Site cleanup goals, description of alternatives for Site cleanup, comparison of cleanup alternatives, and recommended a cleanup alternative.

This SCP includes the selected Site cleanup goals to meet RAOs defined in the ABCA, a description of procedures required in order to implement the selected cleanup, and plans to provide guidance for health and safety measures to be employed during cleanup activities. This SCP outlines the process by which the selected cleanup contractor will implement the cleanup alternative for the Site. The following is a list of the plans included in this SCP:

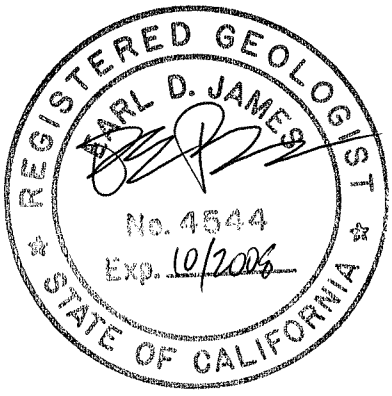
- EKI Site-Specific Health and Safety Plan ("HSP");
- Traffic Control and Waste Transportation Plan;
- Decontamination Plan;
- Dust Control Plan;
- Perimeter Air Monitoring Plan;
- Storm Water Pollution Prevention Plan;
- Soil Cleanup Sampling and Analysis Plan ("SAP"); and
- Quality Assurance Project Plan ("QAPP").

It is understood that the selected cleanup contractor will be required per the Emeryville bidding documents to provide their own HSP and plan addendums, if necessary, as specified in the plans.

We are pleased to have the opportunity to work with you on this project. Please call if you have any questions or wish to discuss these matters in greater detail (650-292-9100).

Very truly yours,

ERLER & KALINOWSKI, INC.



Earl D. James, P.G.
Vice President

Cc: Ignacio Dayrit, City of Emeryville Redevelopment Agency (1 copy)
Barbara Cook, DTSC (2 copies)
Mary Rose Casa, SFRWQCB (1 copy)
Donna Drogos, Alameda County (1 copy)
Diane Strassmaier, U.S. EPA Region 9 (1 copy)
Susan Colman (1 copy)

Site Cleanup Plan
UPRR Parcel D
Emeryville, California

EPA Project No. BF-0942801

Table of Contents

1.0 INTRODUCTION 1-1
1.1 Site Description and History 1-1
1.2 Site Background 1-2
1.3 Site Cleanup Plan Organization 1-2
2.0 SITE CLEANUP DESCRIPTION 2-1
2.1 Planned Future Site Use 2-1
2.2 Cleanup Goals 2-1
2.2.1 Identified Primary Chemicals of Concern 2-1
2.2.2 Selected Cleanup Goals 2-2
2.2.2.1 Cleanup Goals for TPH-d and TPH-mo in Soil 2-3
2.2.2.2 Cleanup Goal for Arsenic in Soil 2-3
2.2.2.3 Cleanup Goal for Cadmium in Soil 2-3
2.2.2.4 Cleanup Goal for Lead in Soil 2-3
2.3 Delineation of COC-Impacted Soil Based on Cleanup Goals 2-3
3.0 SITE CLEANUP PLAN 3-1
3.1 Preparatory Activities 3-1
3.1.1 Site Specific Plans to be Submitted Prior to Site Cleanup Activities 3-2
3.1.1.1 Summary of the EKI Site-Specific Health and Safety Plan 3-2
3.1.1.2 Summary of Traffic Control and Waste Transportation Plan 3-3
3.1.1.3 Summary of Decontamination Plan 3-3
3.1.1.4 Summary of Dust Control Plan 3-4
3.1.1.5 Summary of Perimeter Air Monitoring Plan 3-4
3.1.1.6 Summary of Storm Water Pollution Prevention Plan 3-4
3.1.1.7 Summary of Soil Cleanup Sampling and Analysis Plan 3-4
3.1.1.8 Summary of Quality Assurance Project Plan 3-5
3.1.2 Additional Delineation Soil Sampling 3-5
3.1.3 Pre-Approval of Waste Disposal Classifications 3-5
3.1.4 Permits 3-6
3.1.5 Bidding 3-6
3.1.6 Utility Clearance 3-6
3.1.7 Pre-Excavation Geotechnical Evaluation 3-7
3.1.8 Initial Site Preparation 3-7
3.1.9 Site Security 3-7
3.2 Site Cleanup Activities 3-7
3.2.1 Extent of Excavation 3-7
3.2.2 Excavation Equipment and Methods 3-8

Site Cleanup Plan
UPRR Parcel D
Emeryville, California

EPA Project No. BF-0942801

Table of Contents (Cont'd)

3.2.3 Air Monitoring 3-9
3.2.4 Transportation and Off-Site Disposal of Excavated Soils 3-10
3.2.5 Backfill and Site Restoration 3-10
3.2.5.1 Fill Sampling Specifications 3-11
3.2.5.2 Fill Sampling Procedures 3-11
3.3 Site Cleanup Completion Report 3-11
4.0 PROJECT SCHEDULE AND BUDGET OVERSIGHT 4-1
5.0 SITE MANAGEMENT AND POST-SITE CLEANUP OPERATIONS 5-1
6.0 REFERENCES 6-1

LIST OF TABLES

Table 2-1 Soil Cleanup Goals
Table 2-2 Summary of Analytical Results for Replicate Samples of UPD-2-5-5.5
Table 3-1 Summary of RCRA Hazardous Waste Characterization Analytical Results
Table 3-2 Rationale for Extent of Excavation

LIST OF FIGURES

Figure 1-1 Site Location Map
Figure 1-2 2005 Aerial Photo and Neighboring Properties
Figure 2-1 Geologic Cross-Section Locations and Approximate Ground Surface Topography
Figure 2-2 Geologic Cross-Section A-A'
Figure 2-3 Geologic Cross-Section B-B'
Figure 2-4 Geologic Cross-Section C-C'
Figure 2-5 Geologic Cross-Section D-D'
Figure 2-6 Geologic Cross-Section Locations and Bottom of Artificial Fill Elevation
Figure 3-1 Existing On-Site Sampling Locations and Proposed Additional Delineation Soil Sampling Locations
Figure 3-2 Lateral and Vertical Extents of Excavation
Figure 3-3 Approximate Thickness of Excavation

Table of Contents (Cont'd)

LIST OF APPENDICES

Appendix A	EKI Site Specific Health and Safety Plan
Appendix B	Traffic Control and Waste Transportation Plan
Appendix C	Decontamination Plan
Appendix D	Dust Control Plan
Appendix E	Perimeter Air Monitoring Plan
Appendix F	Storm Water Pollution Prevention Plan
Appendix G	Soil Cleanup Sampling and Analysis Plan
Appendix H	Quality Assurance Project Plan
Appendix I	Laboratory Analytical Reports for Waste Characterization and Replicate Sample Data

1.0 INTRODUCTION

Erler & Kalinowski, Inc. ("EKI") is pleased to present this Draft Site Cleanup Plan ("SCP") for the Union Pacific Railroad ("UPRR") Parcel D property (the "Site"), located in Emeryville, California. The Site is owned by our client, the City of Emeryville Redevelopment Agency ("City"). This report has been prepared by EKI on behalf of the City in accordance with our agreement dated 12 September 2006. The City is considering potential redevelopment options that include a park or mixed use development. As part of the redevelopment process, the City is planning to conduct cleanup of contaminated soil at the Site. The Site was historically used as a rail spur and nearby sites were generally used for industrial or manufacturing purposes.

This non-time critical removal action will be funded partially under a United States Environmental Protection Agency ("U.S. EPA") Brownfields cleanup grant and the City. The City is acting as the Lead Agency under a Memorandum of Understanding with the California Department of Toxic Substances Control ("DTSC") and the San Francisco Bay Regional Water Quality Control Board ("SFRWQCB"). Ms. Susan G. Colman is acting as Brownfields Site Manager ("Site Manager") who will provide regulatory and technical support to the City; and the City will administer the cleanup grant. The Site Manager will confer with the DTSC and SFRWQCB for review and approval of plans to be submitted with the Final SCP.

This SCP also meets the corrective action and closure requirements for the Technichem facility's Solid Waste Management Unit ("SWMU") #6 (Health and Safety Code 25187 and California Code of Regulations ("CCR"), Title 22, Division 4.5, section 66264.110 et seq. or 66264.111). The cleanup alternatives and the basis for selection of the recommended cleanup alternative for the Technichem SWMU #6 were presented in the *Analysis of Brownfield Cleanup Alternatives,* dated 27 November 2007 ("ABCA"; EKI, 2007).

1.1 Site Description and History

The Site is approximately 2 acres and is located to the north of the intersection of Sherwin Avenue and Halleck Street in Emeryville, California (Figure 1-1). The Site is bounded by the UPRR tracks on the west, the Sherwin-Williams property on the east and north, and the southern edge of Sherwin Avenue on the south (Figure 1-2). The Site was used historically as a railroad spur, and surrounding sites were generally used for industrial and manufacturing purposes. The Site is currently undeveloped with the exception of access roads along the eastern and southern boundaries of the Site.

The Technichem facility's SWMU #6 is located at the southwest corner of the Site, adjacent to the building that formerly housed Technichem. According to DTSC's Hazardous Waste Management Program staff, the Technichem facility's SWMU #6 was not regularly used for storage of hazardous wastes. All equipment except for one were non-regulated units since they did not handle hazardous waste. Air Adsorber C-1 was considered a regulated unit since it processed tetrachloroethene (PCE) vapors generated from treatment of cartridge filters

(hazardous waste) in the Process Room. Also, the potential for future releases to air, soil, groundwater, and surface water was considered low since air emissions were controlled, the area is paved and was not normally used for storage of hazardous waste. The potential for release to air was considered low from the drums of activated carbon because 1) they contained only trace amounts of PCE; 2) all containers were kept closed; 3) the drums were protected from the weather using tarp; and 4) the drums were normally not stored in this area..

Current uses of properties surrounding the Site include: a) the mixed-use Emeryville Warehouse Lofts, the Golden Gate Badminton Club facility, the 45th Street Artists' Cooperative, and the Pelco Distributors facility to the south-southeast, b) the Horton Street Lofts to the east, and c) the Bay Street Mall and IKEA across the UPRR tracks to the west.

The Sherwin-Williams property, located to the north and east of the Site, is vacant, but groundwater extraction and treatment activities are currently being conducted.

1.2 Site Background

The City is preparing the Site for redevelopment. As part of the process, EKI identified past uses of the Site and adjacent properties that may have resulted in releases of chemicals to soil and groundwater in the *Phase I Environmental Site Assessment Report,* dated 2 October 2006 ("Phase I Report"; EKI, 2006a). EKI conducted a soil and groundwater investigation in October 2006, and concentrations of chemicals detected in soil and groundwater were compared with applicable screening criteria to identify chemicals of concern ("COCs"). The results and conclusions of October 2006 soil and groundwater investigation were described in the *Soil and Groundwater Investigation Data Report,* dated 14 November 2006 ("Phase II Report"; EKI, 2006b) and were also summarized in the ABCA (EKI, 2007).

The ABCA was prepared to develop remedial action objections, to evaluate cleanup alternatives for the Site, and to recommend a cleanup alternative for the Site. The ABCA conforms to 40 CFR 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan and the regulatory processes cited above for the Technichem SWMU #6.

1.3 Site Cleanup Plan Organization

The SCP is organized into six sections as follows:

- Section 1.0 – Introduction
- Section 2.0 – Site Cleanup Description
- Section 3.0 – Site Cleanup Plan
- Section 4.0 – Project Schedule and Budget Oversight
- Section 5.0 – Site Management and Cleanup Operations
- Section 6.0 – References

2.0 SITE CLEANUP DESCRIPTION

This section describes the Site cleanup approach for soil and groundwater contamination issues related to the presence of hazardous substances or petroleum hydrocarbons in soil and groundwater that may affect potential future use and redevelopment of the Site. The cleanup actions described in this SCP will provide human health and environmental protection for potential future land uses described below.

2.1 Planned Future Site Use

Potential future Site uses include a park or a mixed use development. Both of these potential future uses are described below.

The park would likely be developed by the City. Proposed park amenities might include multi-use lawn areas, a basketball court, an amphitheater, and a children's play area. Potential exposure pathways for receptors (park patrons and construction workers using and working in the multi-use lawn area) include inhalation of vapors and/or fugitive dust. A basketball court or amphitheatre would most likely be capped with asphalt and/or concrete, so exposures to vapors and/or fugitive dust will be limited to construction workers developing the area. Any children's play area would warrant the most conservative cleanup approach.

A mixed use development on the Site might include ground floor residential or commercial/retail uses. Any residential use would be "urban" residential, meaning there would be no direct contact with Site soils. Potential exposure pathways for receptors (residents, commercial workers, and construction workers) include inhalation of vapors and/or fugitive dust.

2.2 Cleanup Goals

2.2.1 Identified Primary Chemicals of Concern

As presented in the Phase II report (EKI, 2006a) and the ABCA (EKI, 2007), the primary COCs in soil at the Site are arsenic, cadmium, cobalt, lead, zinc, total petroleum hydrocarbons ("TPH") as diesel ("TPH-d"), and TPH as motor oil ("TPH-mo"), and the primary COC in groundwater is arsenic.

Additional evaluation of analytical results for cobalt in soil indicated that cobalt was not a primary COC in soil (see Section 2.3). Detected concentrations of cobalt in soil were less than the SFRWQCB Environmental Screening Level ("ESL") for residential shallow soil (<3 meters) where potentially impacted groundwater is not a current or potential drinking water resource for cobalt in soil of 40 mg/kg (SFRWQCB, 2007). The EPA Region 9 Preliminary Remediation Goal ("PRG") (EPA, 2004) and the California Human Health Screening Level ("CHHSL") (CAL/EPA, 2005) for residential exposure for cobalt in soil are 900 mg/kg and 660 mg/kg,

respectively. Therefore, cobalt is not retained as a primary COC in soil, and a soil cleanup goal will not be developed for cobalt.

Preliminary soil cleanup goals were selected for all TPH constituents (TPH-g, TPH-d, and TPH-mo) during analysis of cleanup alternatives in the ABCA (EKI, 2007). However, further evaluation indicates that a cleanup goal is not necessary for TPH-g because: 1) TPH-g exceeded the residential ESL of 100 mg/kg in only 1 of 44 soil samples (UPD-5A-4-4.5 at a concentration of 240 mg/kg TPH-g), and 2) this location with TPH-g impacted soil will be addressed because TPH-d and TPH-mo concentrations at UPD-5A-4-4.5 exceed soil cleanup goals.

Although zinc was identified as a primary COC in the Phase II report (EKI, 2006a) and the ABCA (EKI, 2007), detected concentrations of zinc in soil were less than the ESL for direct exposure of 4,600 mg/kg and were also less than the PRG and CHSSL for residential exposure of 23,000 mg/kg. Therefore, zinc is not retained as a primary COC in soil, and a soil cleanup goal will not be developed for zinc.

Chemicals of concern detected in soil at the Technichem SWMU #6 are the same as those detected for the remainder of the Site.

2.2.2 Selected Cleanup Goals

Cleanup goals were selected to allow for any development use of the Site, with the exception of single-family residential (e.g., multi-family residential, park, etc.), that may be contemplated and are also generally consistent with cleanup goals at neighboring sites in the vicinity. No specific development scenario was considered.

Site-specific cleanup goals for groundwater have not been proposed because: 1) groundwater is not a source of drinking water on Site and was not encountered within 10 feet bgs during groundwater collection activities and 2) no source of contamination to groundwater has been defined at the Site. COCs detected in groundwater are likely the result of releases from upgradient and/or adjacent sites. Future cleanup goals for groundwater may have to be established if a parking structure is planned for the Site that requires excavation to depths where groundwater may be encountered.

Soil cleanup goals ("cleanup goals") proposed for primary COCs in soil (TPH-d, TPH-mo, arsenic, cadmium, lead, and zinc) are similar to previously established cleanup goals used for other projects in the City of Emeryville, including the following:

- Pinnacle property located on 64th Street and Christie Avenue;
- Former UPPR Parcels 1, 2, 3, 4, 4A, 6, and 7; and
- Former Dutro site located on 62nd Street and Hollis Street.

Soil cleanup goals for primary COCs in soil are summarized in Table 2-1. Because the cleanup goals for TPH and metal COCs in soil at the Site were established for a residential land use and

address potential exposure concerns, they provide a conservative estimate for park use by recreational visitors with much more limited Site exposures.

2.2.2.1 Cleanup Goals for TPH-d and TPH-mo in Soil

The cleanup goal for TPH-d in soil is 400 mg/kg. The cleanup goal for TPH-mo is 1,000 mg/kg. These cleanup goals are the same cleanup goals used for the former Dutro property that is currently being developed for use as a park. These cleanup goals are based upon the 2005 ESLs for direct exposure. The cleanup goal of 400 mg/kg for TPH-d is lower than the current direct exposure ESL (SFRWQCB, 2007) of 540 mg/kg (using a target hazard quotient ["HQ"] of 1), which is consistent with the HQ used by DTSC and USEPA. The cleanup goal of 1,000 mg/kg for TPH-mo is lower than the current direct exposure ESL (SFRWQCB, 2007) of 2,100 mg/kg (using a target HQ of 1), which is consistent with the HQ used by DTSC and USEPA.

The cleanup goal for TPH-d and TPH-mo combined is 1,000 mg/kg, which is the same cleanup goal used for the former Dutro property.

2.2.2.2 Cleanup Goal for Arsenic in Soil

The cleanup goal for arsenic in soil is 24 mg/kg, which is based upon the same information used to develop the arsenic cleanup goals at several other sites throughout Emeryville, including former UPRR Parcels 1, 2, 3, 4, 4A, 6, and 7 that are being developed as parks.

2.2.2.3 Cleanup Goal for Cadmium in Soil

The cleanup goal for cadmium in soil is 5.6 mg/kg, which is based upon the same information used to develop the arsenic cleanup goals at several other sites throughout Emeryville, including former UPRR Parcels 1, 2, 3, 4, 4A, 6, and 7 that are being developed as parks.

2.2.2.4 Cleanup Goal for Lead in Soil

The cleanup goal for lead in soil is 150 mg/kg, which is based on the PRG (EPA, 2004) and the CHHSL (CAL/EPA, 2005) for residential exposure.

2.3 Delineation of COC-Impacted Soil Based on Cleanup Goals

The conceptual model presented in the Phase II report (EKI, 2006a) and the ABCA (EKI, 2007) indicated that COC-impacted soil was primarily located within the artificial fill layer that ranges in depth from ground surface to a maximum of 3.5 feet below ground surface ("bgs"). A

comparison of COC concentrations in soil to cleanup goals in relation to lithologic cross-sections is presented in Figures 2-1 to 2-5 and confirms the conceptual model conclusion that COC-impacted soils are primarily located within the artificial fill layer.[2,3] The topography of the bottom of the artificial fill layer is presented in Figure 2-6.

[2] Analytical results of three replicate samples of UPD-2-5-5.5 indicate that the initial reported laboratory analytical results of 35.9 mg/kg of arsenic and 44.4 mg/kg cobalt for UPD-2-5-5.5 were spurious results and are rejected (Table 2-2 and Appendix J). The maximum reported concentrations of arsenic and cobalt in the three replicate samples were 17.1 mg/kg and 12.4 mg/kg, respectively, and are below cleanup goals.

[3] COC-impacted soil extends into the upper member of the Young Bay Mud at UPD-4 and UPD-5.

3.0 SITE CLEANUP PLAN

Cleanup alternatives were evaluated in the ABCA in accordance with the NCP. Based on this evaluation, a recommendation was made for the cleanup alternative for the Site. The recommended and selected Site cleanup alternative entails excavation and off-Site disposal of COC-impacted soils that exceed cleanup goals and transportation of those soils to off-site permitted disposal facilities. Prior to soil excavation, permits will be obtained and existing asphalt and concrete slabs, roadways, debris, and any encountered below-grade structures will be demolished. Additional delineation soil sampling will be conducted to refine the soil excavation extents and to collect pre-confirmation samples to verify that COC concentrations are below cleanup goals at the proposed vertical extents of excavation. Soil samples also will be collected for waste characterization purposes. Pending pre-approval of waste profiles from the City-approved disposal facilities selected by the remedial contractor ("Contractor"), excavated soil will be directly loaded into trucks and transported to the appropriate disposal facilities (most likely Class I and/or Class II). Additional soil sampling will be conducted after the conclusion of the excavation activities as described in Section 3.2.

3.1 Preparatory Activities

Tasks to be performed prior to commencement of Site cleanup activities are summarized below.

- Preparation of a Site Cleanup Plan (SCP – this document) that describes the details of work to be implemented and the sequence of cleanup actions. The Site Manager will submit a conditional approval of the SCP to DTSC and SFRWQCB for concurrence. The Site Manager will confer with the DTSC and SFRWQCB for review and approval of plans to be submitted with the Final SCP.
- Completion of a geotechnical evaluation to evaluate required structural support criteria to excavate alongside the Southern Pacific Railroad tracks to the west and the Sherwin-Williams Property to the east.
- Completion of contract documents for procurement of a Contractor to perform the cleanup action.
- City preparation of a fact sheet and notice to be posted in the newspaper regarding the 30-day public comment period, and facilitation of a public meeting prior to initiating the cleanup action.
- Selection of a Contractor and completion of contract negotiation and award. The selected Contractor will need to possess a Hazardous Substance Removal Certification from the Contractors State License Board.
- Contractor procurement of necessary permits, and utility clearances prior to the commencement of excavation activities at the Site.
- Collection and analysis of additional soil samples for verification of excavation delineation/pre-confirmation and waste disposal characterization purposes.
- Coordination of pre-approval for waste disposal classifications with potential off-Site permitted disposal facilities.

- Abandonment of three Sherwin Williams groundwater monitoring wells (LF-21, SA-AW-02, and SA-AW-03) that are located within proposed excavation areas at the Site.

3.1.1 Site Specific Plans to be Submitted Prior to Site Cleanup Activities

The following plans are included in this SCP:

- An EKI Site-Specific Health and Safety Plan ("HSP");
- A Traffic Control and Waste Transportation Plan;
- A Decontamination Plan;
- A Dust Control Plan;
- A Perimeter Air Monitoring Plan;
- A Storm Water Pollution Prevention Plan ("SWPPP");
- A Soil Cleanup Sampling and Analysis Plan ("SAP"); and
- A Quality Assurance Project Plan ("QAPP").

The following subsections summarize the contents of each plan and describe requirements for the selected Contractor to prepare a Contractor Site-specific HSP, to prepare a Contractor addendum to the Traffic Control and Waste Transportation Plan and SWPPP, and to prepare a Contractor addendum to the Decontamination Plan and Dust Control Plan, if necessary. Copies of these plans will be retained on the Site during Site cleanup activities. The plans will assist in the management of the construction activities for Site cleanup by identifying techniques the Contractor is to use to implement Site cleanup. The final plans and the Contractor plan addendums will be submitted to the Site Manager, who will confer with DTSC and SFRWQCB separately, as an amendment or addendum to the Final SCP.

The presence of archaeological artifacts was not observed by the overseeing archaeologist during remedial investigations conducted in 2006 at the Site. Therefore, it is assumed that the uncovering of archaeological artifacts is not likely. However, EKI will brief the Contractor to the possibility of uncovering archaeological artifacts. A procedure will be established should such artifacts be found over the course of excavation.

3.1.1.1 Summary of the EKI Site-Specific Health and Safety Plan

A Site-specific HSP will specify, among other things, employee training and personal protective equipment, training and medical surveillance requirements, standard operating procedures, and a contingency plan that conforms to the requirements of 29 Code of Federal Regulations ("CFR") 1910.120 et seq. and other applicable Federal and State laws and regulations, including Title 8, CCR Section 5192.

EKI's Site-specific HSP, presented in Appendix A, was prepared in accordance with Federal and California Occupational Safety and Health Administration ("OSHA") standards for hazardous waste operations (29 CFR 1910.120) and Title 8, CCR Section 5192). EKI's corporate HSP and

this Site-specific HSP have been reviewed and signed by a Certified Industrial Hygienist ("CIH").

EKI's Site-specific HSP includes the following:

- Description of activities and potential hazards;
- Level of personal protection that will be used during sampling activities;
- Definition of exclusion, contaminant reduction, and support zones;
- Required personal protective measures, including work zone air monitoring;
- Key health and safety personnel;
- Training;
- Medical monitoring; and
- Emergency response plan.

The selected Contractor will prepare its own HSP in accordance with the Contract Documents. The Contractor will be responsible for health and safety of their employees and workers sub-contracted to them at the Site. The Contractor's HSP must be reviewed and signed by a CIH. The Contractor's HSP is to address Site-specific issues, Site chemicals of concern, hazard communication, notification of workers, and other topics required by applicable laws and regulations.

3.1.1.2 Summary of Traffic Control and Waste Transportation Plan

EKI has prepared a Traffic Control and Waste Transportation Plan, which is included in Appendix B. The Traffic Control and Waste Transportation Plan specifies procedures for general and unique handling, transportation, and disposal of excavated soil and traffic control issues at the Site during Site cleanup activities. The Traffic Control and Waste Transportation Plan has been prepared following the DTSC guidance *Transportation Plan – Guidance for Developing Transportation Plans for Removal or Remedial Actions* (DTSC, 2001a), and the City's requirements.

The selected Contractor will be required to prepare an addendum to the Traffic Control and Waste Transportation Plan that specifies: (1) the actual off-site disposal facilities and the transportation routes if actual disposal facilities vary from facilities listed in this Traffic Control and Waste Transportation Plan, (2) the Contractor's selected transportation company, and (3) any proposed deviations from procedures specified in the Traffic Control and Waste Transportation Plan.

3.1.1.3 Summary of Decontamination Plan

EKI has prepared a Decontamination Plan, which is included in Appendix C. The Decontamination Plan specifies procedures for removal, collection, and containment of soil and other potentially contaminated material from equipment and transportation vehicles, decontamination of personnel and tools, and methods for temporary storage, characterization,

treatment, and off-Site disposal of decontamination wastes generated during decontamination activities. The selected Contractor will be required to prepare an addendum to the Decontamination Plan if there are any proposed deviations from procedures specified in the Decontamination Plan.

3.1.1.4 Summary of Dust Control Plan

EKI has prepared a Dust Control Plan, which is included in Appendix D. The Dust Control Plan specifies measures to be undertaken to limit generation of dust, measures to be taken if dust is present on adjacent on- and off-site public streets, and measures to control such emissions following identification of problems as defined by airborne Action Levels specified in the Perimeter Air Monitoring Plan. The selected Contractor will be required to prepare an addendum to the Dust Control Plan if there are any proposed deviations from procedures specified in the Dust Control Plan.

3.1.1.5 Summary of Perimeter Air Monitoring Plan

To monitor the effectiveness of the Contractor's dust control practices, perimeter air monitoring will be conducted as described in the Perimeter Air Monitoring Plan ("AMP"), prepared by EKI and included in Appendix E. The AMP develops airborne Action Levels for identified airborne COCs and dust, describes air monitoring procedures, methods, and sampling frequencies, and specifies measures to be undertaken by the Contractor if airborne Action Levels are exceeded.

3.1.1.6 Summary of Storm Water Pollution Prevention Plan

EKI has prepared a SWPPP, which is included in Appendix F, in accordance with the regulatory requirements for construction storm water pollution management and best management practices ("BMP") that will be implemented, such as those identified by the Storm Water Quality Task Force (SWQTF, 1993). The SWPPP specifies measures to be undertaken to limit storm water impacts from the Site such as reducing the sediment load to the storm water runoff from the Site during Site cleanup activities and preventing accidental spills from impacting storm water. The selected Contractor will be required to file a Notice of Intent ("NOI") with the State Water Resources Control Board ("SWRCB") prior to cleanup activities.

The selected Contractor will be required to prepare an addendum to this SWPPP that includes: (1) a copy of the NOI and receipt letter, (2) material safety data sheets for chemicals used or stored on the site during construction, (3) an example BMP inspection form, (4) emergency contact information, and (5) any proposed deviations from procedures specified in the SWPPP.

3.1.1.7 Summary of Soil Cleanup Sampling and Analysis Plan

EKI has prepared a Soil Cleanup SAP included in Appendix G. Prior to soil cleanup activities, soil samples will be collected at the Site to 1) delineate/confirm the final extents of excavation areas, 2) verify that soil analytical data for COCs at excavation extents are below Site cleanup

goals, and 3) obtain waste characterization analytical data for soil disposal pre-approval purposes. The SAP describes methods and procedures for soil sample collection prior to or after excavation, if needed, sample analysis, and quality control. As part of the proposed soil cleanup, the final delineation of the excavation areas will be conducted based upon the results of the additional delineation soil sampling.

3.1.1.8 Summary of Quality Assurance Project Plan

A QAPP, included as Appendix H, has been prepared by EKI and provides a description of field and laboratory procedures to be followed to ensure that samples collected from the Site yield representative data.

3.1.2 Additional Delineation Soil Sampling

Soil samples from an additional 12 sampling locations will be collected within the proposed excavation area to further verify the conceptual model that the vertical extent of COC-impacted soil is delineated by the bottom of the artificial fill layer (Figure 3-1). Soil samples will be collected in accordance with methods outlined in the SAP (Appendix G) and submitted to Calscience Environmental Laboratories Inc. of Garden Grove, California, a California state certified analytical laboratory, for chemical analysis of primary COCs. Based on analytical results and modifications to the conceptual model, the final perimeter and vertical extents of the excavation may be modified.

3.1.3 Pre-Approval of Waste Disposal Classifications

Waste characterization soil sampling was performed in 2006 as part of Phase II investigations. Analytical results as presented in the *Summary of Additional Chemical and Geotechnical Soil Data* (EKI, 2006c) are presented in Table 3-1. Total metal soil concentrations exceeding 20 times the RCRA regulatory criterion were subjected to the TCLP with the leachate being analyzed for that metal. Based on review of the available waste characterization analytical data, soil proposed for excavation was preliminarily classified as either non-hazardous (Class II) or non-RCRA hazardous (Class I). It is estimated that approximately 95-percent of the soil will be disposed of at a non-RCRA hazardous (Class I) facility and that approximately 5-percent of the soil will be disposed of at a non-hazardous (Class II) facility. The preliminary waste disposal classifications and soil quantities for excavation were presented in the ABCA (EKI, 2007).

Additional waste characterization analytical data obtained after additional delineation soil sampling performed in January 2008 will be used to refine the preliminary waste disposal classifications and facilitate pre-approval for disposal from the City-approved, Contractor-selected disposal facilities. Additional waste characterization may include analyzing leachate from the Waste Extraction Test ("WET") method and Toxicity Characteristic Leaching Procedure ("TCLP") and performing a fish bioassay (CCR Title 26 Section 66261.24(6)). The WET and TCLP leachate will be analyzed for selected metals that were determined to be potential hazardous wastes based on the 10 times the soluble threshold limit concentration

("STLC") criterion and the 20 times the Resource Conservation and Recovery Act ("RCRA") regulatory criterion.

3.1.4 Permits

The Contractor will be required to procure necessary permits prior to beginning cleanup activities on the Site. Permits required could include an OSHA excavation permit and Bay Area Air Quality Management District ("BAAQMD") excavation permit. The City has indicated that grading/excavation or encroachment permits will not be required, as this work is being conducted on behalf of the City.

To comply with the Construction Activities Storm Water General Permit (State Water Resources Control Board ["SWRCB"] Order No. 99-08-DWQ), the Contractor shall prepare and submit a Notice of Intent to the SWRCB.

Well installation permits, obtained from ACPWA, will be necessary in order to properly install new groundwater monitoring wells at the Site (see Appendix I).

Well destruction permits for the proper abandonment of three Sherwin Williams groundwater monitoring wells at the Site will be the responsibility of Sherwin Williams.

3.1.5 Bidding

EKI will assist the City with the preparation of the contract documents to be used for bidding purposes by remedial contractors. The bidding documents will incorporate the plans or plan requirements outlined in this SCP that describe the procedures required to implement Site cleanup. It is understood that the selected Contractor will be required per the City bidding documents to provide the following plans or plan addendums in accordance with requirements outlined in this SCP.

- a Contractor Site-specific Health and Safety Plan;
- a Contractor addendum to the Traffic Control and Waste Transportation Plan;
- a Contractor addendum to the Decontamination Plan, if deemed necessary by the Contractor;
- a Contractor addendum to the Dust Control Plan, if deemed necessary by the Contractor; and
- a Contractor addendum to the SWPP.

3.1.6 Utility Clearance

Prior to initiating excavation activities, USA will be notified by the Contractor and EKI at least two working days in advance of initiating cleanup activities to clear excavation areas of utilities. In addition, the planned excavation area will be surveyed for the presence of existing utilities by a private utility locating service.

3.1.7 Pre-Excavation Geotechnical Evaluation

A geotechnical evaluation will be conducted by the City's geotechnical consultant to develop structural support and/or excavation proximity criteria to excavate alongside the Southern Pacific Railroad tracks to the west, the former Technichem facility to the southwest, and the Sherwin-Williams property to the east. The recommendations of this geotechnical evaluation will delineate excavation limits up to these boundaries where excavation can no longer extend. The results of the geotechnical evaluation will be submitted to the Site Manager for review.

3.1.8 Initial Site Preparation

Prior to cleanup activities on the Site, the selected Contractor's field crew will be conducting initial mobilization activities that are non-invasive and will not include the handling of soil that could potentially be hazardous. The allowable activities include setting up field offices (if necessary), constructing a decontamination pad, underground utility line location, preparing dust control measures, and other pre-excavation activities.

3.1.9 Site Security

Prior to cleanup activities on the Site, the selected Contractor shall construct perimeter fencing and lockable gates to restrict access to the Site. Contractor will be responsible for maintaining Site security and will promptly repair, maintain, or install new fencing, as needed, to maintain Site security at all times.
Full-scale cleanup work described in the next section can begin when the preparatory activities described in this section are complete.

3.2 Site Cleanup Activities

3.2.1 Extent of Excavation

The anticipated lateral and vertical extents of excavation at UPRR Parcel D are shown on Figure 3-2 and was delineated based on the rationale summarized in Table 3-2. The approximate thickness of excavation is shown on Figure 3-3 and is summarized in Table 3-2. The vertical extent of excavation will generally be the bottom of the artificial fill layer based on the conceptual model conclusion that COC-impacted soil at concentrations greater than the cleanup goals are primarily located within the artificial fill with the exception of a few sampling locations as indicated on Figure 3-2 and Table 3-2. The lateral extent of excavation was based on areal distribution of sampling locations with COC-impacted soil at concentrations greater than the cleanup goals. It is estimated that approximately 12,000 tons of soil will be excavated and disposed of at off-site permitted disposal facilities.

The October 2006 soil analytical data will serve as pre-confirmation samples, and therefore, the vertical extent of excavation as outlined in Figure 3-2 is proposed to be the final vertical extent of excavation. The vertical extent of excavation will be subject to modification if additional soil

delineation sampling in January 2008 indicate that the conceptual model needs to be re-evaluated in consultation with the Site Manager and based on observed field conditions during excavation.

The proposed lateral extent of excavation is outlined on Figure 3-2. Due to access limitations and concerns to protect adjacent above-grade neighboring structures and use of street and rail corridors, lateral extents of the excavations will not proceed beyond the property lines or excavation support structures or buffer zones, as deemed necessary by the railroad, the City, or results of the pending geotechnical evaluation. Confirmation soil samples will be collected from sidewalls of the excavation where the proposed lateral extent of excavation is not delineated by a property line. If sidewall confirmation soil samples exceed cleanup goals, additional excavation may be necessary unless further excavation is not possible beyond excavation support structures or buffer zones to maintain integrity of above-ground structures, railroad tracks, sidewalks, etc. If further excavation is not possible due to structural or access issues, orange plastic safety fence will be placed along these excavation perimeter sidewalls. Final limits of excavation will be surveyed by a licensed surveyor and the survey information and any applicable confirmation sampling analytical results will be added to the City's OSIRIS Mapped Real Estate Parcel Database. The City's OSIRIS database is a notification and warning system for City personnel prior to issuing excavation permits. The OSIRIS system is being used as an institutional control throughout the City where soil cannot be excavated due to structural limitations (e.g., near sidewalks, adjacent buildings, etc.).

Confirmation soil samples will be collected from bottoms of the excavation, as necessary, if the distribution of existing and additional delineation pre-confirmation soil data are not sufficient at depth intervals that are directly below the excavation elevations as shown on Figure 3-2. Prior to backfill, the Site Manager will review pre-confirmation and confirmation soil sampling distribution and data. Confirmation soil samples will be collected and analyzed for primary COCs in accordance with methods outlined in the SAP (Appendix G). The final extent of excavation will be surveyed by a licensed surveyor.

The extent of excavation extends across a majority of the Site. Therefore, the overall excavation area may be staged by the Contractor into smaller areas that will be excavated and backfilled according to procedures listed above and below to maintain access for excavation activities and to maintain access to Sherwin Street as long as possible until progression of excavation activities warrants closure of Sherwin Street.

3.2.2 Excavation Equipment and Methods

The specific equipment and means that will be utilized to implement this work will be at the discretion of the selected Contractor. It is anticipated that this soil cleanup project can be accomplished with standard excavation and backfill equipment. Some of the equipment expected to be used at the Site includes track-mounted hydraulic excavators, backhoes, water trucks, intermodal bins, end dump trucks, bulldozers, and compactors.

To the extent possible, excavated soils will be directly loaded into trucks for off-Site disposal to reduce handling and potential dust emissions. Trucks will then be covered and transported to

designated disposal facilities permitted for the waste. To accomplish direct loading of trucks for soil disposal, the majority of identified soil for excavation will be pre-characterized and designated as acceptable to the selected, permitted disposal facilities prior to the start of soil cleanup activities. Refer to the Traffic Control and Waste Transportation Plan in Appendix B for more specific details.

Per Emeryville's noise ordinance, work hours are limited to weekdays between 7 am and 6 pm. However, it is anticipated that actual work hours for this project will be limited to between 7 am and 4 pm. The Contractor shall comply with all local sound control and voice level rules, regulations and ordinances which apply to any work performed.

Excavated soils that may potentially require waste characterization during soil cleanup activities and prior to off-Site disposal, assumed to be limited in volume, will be stockpiled or loaded directly into lined intermodal bins. Stockpiled soil or soil placed in intermodal bins will be handled as potential hazardous waste until proven otherwise. Soil stockpiles will be managed in accordance with procedures outlined in the Dust Control Plan and the SWPPP (Appendix D and F). Stockpiled soil will be placed on plastic sheeting (minimum 10-mil thickness) and securely covered with plastic sheeting (minimum 10-mil thickness). The intermodal bins can be stored on-Site, allowing the soil within the bin to be sampled, covered, and stored until characterization for disposal is completed. The intermodal bins can be transported by truck. All stockpiles or bins will be covered at the end of each work day and when not being actively handled. After classifying the soil stockpiles or individual bins of soil for the appropriate disposal facilities, the soil will be trucked to permitted off-site disposal facilities.

Dewatering is not anticipated to be conducted during cleanup activities. If necessary, water removed from the excavation will be stored on Site and will be transported and disposed at an appropriately permitted off-Site facility or facilities in accordance with methods and procedures described in the Traffic Control and Waste Transportation Plan (Appendix B).

3.2.3 Air Monitoring

Control of dust and airborne COCs is a significant concern for this project. During active Site cleanup activities, air monitoring will be performed at the Site perimeter in accordance with the Perimeter Air Monitoring Plan (Appendix E) to evaluate if dust control methods applied by the Contractor are adequate to protect the surrounding community from exposure to dust and airborne COCs. Specific dust control techniques that the Contractor will implement during Site cleanup activities are described in the Dust Control Plan (Appendix D).

In addition to perimeter air monitoring, personal air monitoring will be performed by the Contractor to assess potential health and safety impacts to on-Site workers. A plan for personal air monitoring will be included in the Contractor's HSP. A plan for personal air monitoring of EKI field representatives is included in the Site-specific HSP included in Appendix A.

In accordance with the Site-specific HSP, included in Appendix A, field personnel will perform air monitoring with a direct reading OVM in the breathing zone at each EKI work area during

remediation activities to evaluate the work environment and be protective of EKI field representatives. This includes the area in the vicinity of borehole UPD-5, where strong chemical odor was noted while drilling. Air monitoring to evaluate the work environment and be protective of the Contractor's field personnel will be described in the Contractor's Site-specific HSP.

3.2.4 Transportation and Off-Site Disposal of Excavated Soils

Soil identified as exceeding cleanup goals will be excavated and direct loaded, to the extent possible, into trucks for transportation to off-site disposal facilities that are permitted to accept specific classifications of wastes. Soil and debris from the Site will be transported and disposed in accordance with the Traffic Control and Waste Transportation Plan (Appendix B). Permitted disposal facilities for the various waste classifications will be identified by the Contractor in the Contractor's addendum to the Traffic Control and Waste Transportation Plan.

3.2.5 Backfill and Site Restoration

After excavation activities are completed, the excavation area will be surveyed, then backfilled and compacted. The excavations will be backfilled with clean import fill and compacted to specifications to be provided by City of Emeryville in the bid documents. Final grading of the backfill will be accomplished in accordance with specifications provided by the City in the bid documents.

Import fill, for backfilling of excavations, may be obtained from a variety of as yet unidentified sources. The screening of these fill soils for environmental concerns will be undertaken following the DTSC guidance *Information Advisory – Clean Imported Fill Material* (DTSC, 2001b). The basic elements of this guidance are:

1. Determining the site use history of the soil source;
2. Identifying the potential COCs associated with the historical uses or natural characteristics of the soil source; and
3. Performing testing of representative soil samples.

The results of the characterization activities regarding fill material will be provided to Site Manager for review prior to the importation of the soils. The information will also be documented in the closure report to be prepared at the completion of the remediation activities (see Section 3.3). The subsections below provide procedures for collecting and analyzing import fill samples and for evaluating analytical data to determine if import fill quality is suitable for use as backfill material at the Site.

Geotechnical analysis will also be performed to generate compaction curves for in-place compaction testing that will be performed during backfill operations. Backfill requirements will be consistent with potential future development plans for the Site.

3.2.5.1 Fill Sampling Specifications

Fill material to be used at the Site will include import fill. Before import fill may be brought on-Site by the Contractor, the Contractor will collect samples of the import fill material at its source for both chemical and geotechnical testing purposes. Import fill sampling frequencies will be consistent with DTSC guidance (DTSC, 2001b). The volume of import fill likely to be required is greater than 5,000 cubic yards. Therefore, import fill samples would be collected at a frequency of twelve samples for the first 5,000 cubic yards of fill and one sample per additional 1,000 cubic yards of fill (DTSC, 2001b), given that the fill originates from the same source.

Fill samples will be analyzed for TPH, volatile organic compounds ("VOCs"), semi-volatile organic compounds ("SVOCs"), Title 22 metals, hexavalent chromium, percent moisture, organochlorine pesticides, and polychlorinated biphenyls ("PCBs"). Additional analyses may be deemed necessary depending on soil sources and associated site history for import fill. Analytical data for backfill will be reviewed by the City and the Client Representative in consultation with the Site Manager prior to being transported to the Site. If samples from the potential fill source(s) have detections of analytes above the expected reporting limits listed in the QAPP (Appendix H), the fill material may be accepted if Site-specific primary COCs were detected below cleanup goals and if other analytes were detected below applicable cleanup goals for other sites throughout Emeryville with similar future land use or below residential screening criteria such as ESLs, CHHSLs, or PRGs, as determined by the City and the Client Representative in consultation with the Site Manager. Geotechnical testing will be conducted to verify the backfill is placed in accordance with the Contract Documents.

3.2.5.2 Fill Sampling Procedures

Fill soil samples requiring chemical analysis will be collected in pre-cleaned brass or stainless steel liners or glass jars. Brass or stainless steel liners or glass jar will be driven directly into the pile of fill soil. If liners are used, both ends of the brass or stainless steel liner will be covered with Teflon sheets and capped with plastic end caps. Samples to be analyzed for TPH-g and VOCs will be collected in 5-gram EnCore samplers. A sample label will be attached to each sample container. Samples for chemical analysis will be packaged in zip-closure plastic bags and then placed on ice in a cooler for storage and transport to the analytical laboratory under chain-of-custody procedures. Sample naming, labeling, handling, transport, and chain-of-custody procedures are described in the SAP (see Appendix G).

3.3 Site Cleanup Completion Report

At the completion of Site cleanup, EKI will prepare a completion report on behalf of the City that describes implementation of the Site cleanup activities. The report will contain the following items:

- Summary of Site cleanup field activities and observations;
- Documentation of implementation of and conformance with the Plans specified as Appendix A to H;

- Documentation of laboratory analytical results for import fill, additional delineation soil sampling, waste characterization, or other sampling needs as deemed necessary based on field observations and conditions;
- Documentation that cleanup goals were met; and
- Documentation of final extent of excavation.

4.0 PROJECT SCHEDULE AND BUDGET OVERSIGHT

There is no regulatory-imposed schedule with deadlines for Site cleanup. Site cleanup activities are planned for the first half of 2008.

The total cost range for Site cleanup is $2,300,000 to $4,900,000.[4]

The project will be funded in part under: 1) a cleanup grant to the City of Emeryville Redevelopment Agency from the U.S. EPA, 2) a loan to the Redevelopment Agency from the City of Emeryville's Capital Incentives for Emeryville Remediation and Redevelopment ("CIERRA", which is funded by the U.S. EPA Revolving Loan Fund), and 3) Redevelopment Agency funds. The cleanup grant is administered by the Redevelopment Agency and CIERRA is administered by the City of Emeryville.

[4] The total cost range for Site cleanup is based on the estimated cost range for Alternative 2 in the ABCA but does not include groundwater monitoring costs.

5.0 SITE MANAGEMENT AND POST-SITE CLEANUP OPERATIONS

Procedures for Site management, security, and safety are provided in the plans and requirements for plan preparation included as appendices to this SCP.

For the soil cleanup, no ongoing operations or maintenance will be required, as no equipment will be installed as part of the soil cleanup activities. As described above, if further excavation is not possible due to structural or access issues, orange plastic safety fence will be placed along these excavation perimeter sidewalls. Final limits of excavation will be surveyed by a licensed surveyor and the survey information and any applicable confirmation sampling analytical results will be added to the City's OSIRIS Mapped Real Estate Parcel Database, the City's web application that provides on-line access to environmental status for parcels and is used by City personnel as a notification and warning system prior to issuing excavation permits.

It is anticipated that after Site cleanup, Sherwin Williams will re-install the three groundwater monitoring wells (LF-21, SA-AW-02, and SA-AW-03) that will be destroyed to facilitate Site cleanup. These wells are currently located along the upgradient or eastern boundary of the Site. Subsequent monitoring of Sherwin Williams wells for arsenic in groundwater will be sufficient to provide an approximation of groundwater quality at Parcel D.

6.0 REFERENCES

CAL/EPA, 2005. *Use of California Human Health Screening Levels ("CHHSLs") in Evaluation of Contaminated Properties*, January 2005.

California Department of Health Services ("DHS"), 2006. *MCLs, DLRs, and PHGs for Regulated Drinking Water Contaminants,* 7 March 2006.

CDM, 2005. *Feasibility Study/Remedial Action Plan,* The Sherwin-Williams Company, 1450 Sherwin Avenue, Emeryville, California, Camp Dresser & McKee Inc., 5 May 2005.

DTSC, 2001a. *Transportation Plan –Guidance for Developing Transportation Plans for Removal or Remedial Actions,* California Environmental Protection Agency, Department of Toxic Substances Control, Interim Final, 5 December 2001 (update of *Transportation Plan Preparation Guidance for Site Remediation*, dated May 1994).

DTSC, 2001b. *Information Advisory - Clean Imported Fill Material*, California Environmental Protection Agency, Department of Toxic Substances Control, October 2001.

EKI, 2004. *Final Remedial Plan, Former Union Pacific Railroad Parcels.* September 2004

EKI, 2006a. *Phase I Environmental Site Assessment ("Phase I")*, UPRR Parcel D at the Intersection of Sherwin Avenue and Halleck Street, Emeryville, California, 2 October 2006.

EKI, 2006b. *Soil and Groundwater Investigation Data Report ("Phase II")*, UPRR Parcel D, Emeryville, California, Erler & Kalinowski, Inc., 14 November 2006.

EKI, 2006c. *Summary of Additional Chemical and Geotechnical Soil Data*, UPRR Parcel D, Emeryville, California, Erler & Kalinowski, Inc., 17 November 2006.

EKI, 2007. *Analysis of Brownfields Cleanup Alternatives*, UPRR Parcel D, Emeryville, California, Erler & Kalinowski, Inc., 27 November 2007.

Geomatrix, 2005. *Summary of Past and Current Environmental Site Investigations and Remediation Activities*, Toxics Case No. RO0002619, 4226 Halleck Street, Emeryville, California, Geomatrix Consultants, Inc., 28 February 2005.

Lawrence Berkeley National Laboratory ("LBNL") and Parsons Engineering Science, Inc., 2002. *Analysis of Background Distributions of Metals in the Soil and Lawrence Berkeley National Laboratory*, June 2002.

LFR, 2006a. *Combined Groundwater and NPDES Self-Monitoring Reports for the Quarterly Period April 1 to June 30, 2006,* Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California, LFR Inc., 28 July 2006.

LFR, 2006b. *Combined Groundwater and NPDES Self-Monitoring Reports for the Quarterly Period January 1 to March 31, 2006,* Sherwin-Williams Site, 1450 Sherwin Avenue, Emeryville, California, LFR Inc., 28 April 2006.

SFRWQCB, 2007. *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater (Interim Final)*, San Francisco Bay Regional Water Quality Control Board, November 2007.

SWQTF, 1993. *California Storm Water Best Management Practice Handbooks,* Storm Water Quality Task Force, March 1993

U.S. EPA, 2004. *Region 9 Preliminary Remediation Goals ("PRGs") 2004 Table*, 28 December 2004.

TABLE 2-1
SOIL CLEANUP GOALS
UPRR Parcel D
Emeryville, California

Primary COCs (a)	Detected Concentration Range (mg/kg in dry weight)	Soil Cleanup Goal (mg/kg in dry weight)
TPH-d	< 5.8 to 5,400	400
TPH-mo	< 29 to 19,000	1,000
TPH-d and TPH-mo combined	--	1,000
Arsenic	1.99 to 145	24
Cadmium	<0.114 to 10	5.6
Lead	5.88 to 684	150

Abbreviations
COCs = chemicals of concern
ft bgs = feet below ground surface
TPH = total petroleum hydrocarbons
TPH-d = TPH as diesel
TPH-mo = TPH as motor oil
mg/kg = milligrams per kilogram

References/Notes
a) *Soil and Groundwater Investigation Data Report*, UPRR Parcel D, Emeryville, California, Erler & Kalinowski, Inc., 14 November 2006.

TABLE 2-2
SUMMARY OF SOIL ANALYTICAL RESULTS FOR REPLICATE SAMPLES OF UPD-2-5-5.5
UPRR Parcel D
Emeryville, California

Sample Location	Sample ID	Sample Date	Sample Depth (ft bgs)	Sample Elevation (ft msl)	Lithologic Unit	Analytical Results (mg/kg in dry weight)	
						Arsenic	Cobalt
UPD-2	UPD-2-5-5.5	10/16/2006	5 - 5.5	3.66 to 3.16	YBM - lower	35.9 R	44.4 R
	UPD-2-5-5.5 R1	10/16/2006	5 - 5.5	3.66 to 3.16	YBM - lower	16.6	12.4
	UPD-2-5-5.5 R2	10/16/2006	5 - 5.5	3.66 to 3.16	YBM - lower	16.1	6.29
	UPD-2-5-5.5 R3	10/16/2006	5 - 5.5	3.66 to 3.16	YBM - lower	17.1	6.07

Abbreviations:
ft bgs = feet below ground surface
ft msl = feet mean sea level
mg/kg = Milligrams per kilogram
R = Data for this sample is deemed not usuable (a).
YBM = Young Bay Mud

Notes:
(a) Analytical results of three replicate samples of UPD-2-5-5.5 (UPD-2-5-5.5 R1, UPD-2-5-5.5 R2, and UPD-2-5-5.5 R3) indicate that the initial reported laboratory analytical results of 35.9 mg/kg of arsenic and 44.4 mg/kg cobalt for UPD-2-5-5.5 were spurious results and are rejected. The maximum reported concentrations of arsenic and cobalt in the three replicate samples were 17.1 mg/kg and 12.4 mg/kg, respectively.

TABLE 3-1
SUMMARY OF RCRA HAZARDOUS WASTE CHARACTERIZATION ANALYTICAL RESULTS
UPRR Parcel D
Emeryville, California

Sample Location	Sample ID	Sample Date	Sample Depth (ft bgs) (a)	Lithologic Unit	Analytical Results (d)					
					Arsenic (mg/kg in dry weight)	TCLP Arsenic (mg/L)	Lead (mg/kg in dry weight)	TCLP Lead (mg/L)	Zinc (mg/kg in dry weight)	TCLP Zinc (mg/L)
UPD-1	UPD-1-0-2.25	10/16/2006	0 - 2.25	Fill	51.9	--	120	0.136	160	--
UPD-3	UPD-3-0-2	10/16/2006	0 - 2	Fill	75.2	<0.1	104	<0.1	200	--
UPD-4	UPD-4-0-3	10/16/2006	0 - 3	Fill	26.1	--	684	2.72	1,060	15.8
UPD-7	UPD-7-0-2	10/18/2006	0 - 2	Fill	145	<0.1	469	0.695	660	--
UPD-8	UPD-8-0-2	10/17/2006	0 - 2	Fill	48.4	--	258	0.209	395	--
UPD-10	UPD-10-0-2.5	10/17/2006	0 - 2.5	Fill	57.8	<0.1	401	0.838	1,340	21.2
UPD-12	UPD-12-0-2.5	10/17/2006	0 - 2.5	Fill	98.9	<0.1	301	0.271	501	--
UPD-14	UPD-14-0-2	10/17/2006	0 - 2	Fill	29.9	--	175	1.43	2,970	3.78
TCLP					**na**	**5**	**na**	**5**	**na**	**na**
TTLC					**500**	**na**	**1,000**	**na**	**5,000**	**na**

Abbreviations:
<0.50 = Compound not detected at or above indicated laboratory reporting limit
ft bgs = feet below ground surface
mg/kg = Milligrams per kilogram
mg/L = milligrams per liter
na = not applicable or not available
RCRA = Resource Conservation and Recovery Act
TCLP = Toxicity Characteristic Leaching Procedure
TTLC = Total Threshold Limit Concentration

Notes:
(a) Sampling depths at each borehole location do not include the thickness of overlying asphalt or concrete layers that range from approximately 0.5 to 1-foot in thickness.
(c) Results are reported on a dry weight basis.
(d) Concentrations of metals that equal or exceed TCLP or TTLC are shown in bold.

TABLE 3-2
RATIONALE FOR EXTENT OF EXCAVATION
UPRR Parcel D
Emeryville, California

Sample Location	Sample ID	Sample Date	Sample Depth (ft bgs) (a)	Sample Elevation (ft msl)	Lithologic Unit	Ground Surface Elevation (ft msl)	Proposed Excavation Elevation (ft msl)	Excavation Thickness (ft)	Analytical Results (mg/kg in dry weight)																	
									Primary COCs (b)					Other COCs (c, d)												
									Arsenic	Cadmium	Lead	TPH-d	TPH-mo	Antimony	Barium	Hex Chromium	Cobalt	Copper	Mercury	Molybdenum	Zinc	TPH-g	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(a)Fluoranthene	1,4-Dichlorobenzene	Aroclor 1254
UPD-1	UPD-1-0-2.25	10/16/2006	0 - 2.25	10.21 to 7.96	Fill	10.21	7.7	2.5	**51.9**	1.13	120	55	170	1.52	115	0.33	9.99	67.1	0.157	0.623	160	--	<0.42	<0.36	<0.42	<0.52	0.065
	UPD-1-2-2.5	10/16/2006	2 - 2.5	8.21 to 7.71	Fill				10.2	0.551	**472**	**290**	**750**	**13.5**	216	0.15	14.8	214	0.318	1.08	279	<0.23	<0.47	<0.41	<0.47	<0.59	<0.059
	UPD-1-4-4.5	10/16/2006	4 - 4.5	6.21 to 5.71	YBM - upper		na	na	10.2	0.174	29.6	<6.3	<32	<0.633	153	0.12	11.1	23.9	<0.106	0.913	83.1	<0.28	<0.51	<0.44	<0.51	<0.63	<0.063
UPD-2	UPD-2-1-1.5	10/16/2006	1 - 1.5	7.66 to 7.16	YBM - upper	8.66	na (f)	na (f)	17.2	0.444	9.9	<6	<30	<0.602	173	0.39	11.6	27.7	<0.101	0.93	68.6	<0.27	<0.48	<0.42	<0.48	<0.6	<0.06
	UPD-2-5-5.5	10/16/2006	5 - 5.5	3.66 to 3.16	YBM - lower				NU	0.37	13.7	<6.1	46	<0.61	225	<0.049	NU	25.2	<0.102	1.25	70.6	<0.27	<0.49	<0.43	<0.49	<0.61	<0.061
	UPD-2-5-5.5 R1	10/16/2006	5 - 5.5	3.66 to 3.16	YBM - lower				16.6	--	--	--	--	--	--	--	12.4	--	--	--	--	--	--	--	--	--	--
	UPD-2-5-5.5 R2	10/16/2006	5 - 5.5	3.66 to 3.16	YBM - lower				16.1	--	--	--	--	--	--	--	6.29	--	--	--	--	--	--	--	--	--	--
	UPD-2-5-5.5 R3	10/16/2006	5 - 5.5	3.66 to 3.16	YBM - lower				17.1	--	--	--	--	--	--	--	6.07	--	--	--	--	--	--	--	--	--	--
UPD-3	UPD-3-0-2	10/16/2006	0 - 2	8.17 to 6.17	Fill	8.17	6.1	2.1	**75.2**	1.16	104	47	140	0.83	198	<0.043	10.2	65.1	0.326	0.79	200	--	<0.43	<0.38	<0.43	<0.54	<0.054
	UPD-3-3-3.5	10/16/2006	3 - 3.5	5.17 to 4.67	YBM - upper		na	na	5.38	0.427	19.2	<6.2	<31	<0.617	145	<0.05	11.7	23.9	0.225	0.596	70.5	<0.26	<0.5	<0.43	<0.5	<0.62	<0.062
	UPD-3-7.5-8	10/16/2006	7.5 - 8	0.67 to 0.17	YBM - lower				4.84	<0.128	6.38	16	<32	<0.641	163	0.12	8.23	22.3	<0.107	0.412	58.4	<0.3	<0.52	<0.45	<0.52	<0.65	<0.065
UPD-4	UPD-4-0-3	10/16/2006	0 - 3	8.69 to 5.69	Fill	8.69	5.1	3.6	**26.1**	**8.28**	**684**	64	200	1.62	195	*9.8*	19.7	160	0.896	2.05	1,060	--	<0.44	<0.39	<0.44	<0.55	**0.74**
	UPD-4-3-3.5	10/16/2006	3 - 3.5	5.69 to 5.19	YBM - upper				14.9	0.903	**254**	<6.7	<33	<0.667	238	<0.053	28.9	56.4	0.281	1.12	251	<0.33	<0.53	<0.47	<0.53	<0.67	<0.067
	UPD-4-7.5-8	10/16/2006	7.5 - 8	1.19 to 0.69	YBM - lower		na	na	2.6	1.31	11.5	<6.5	<33	<0.649	246	<0.052	10	48.5	<0.109	1.35	136	<0.31	<0.52	<0.46	<0.52	<0.65	<0.065
UPD-5	UPD-5-1.5-2	10/16/2006	1.5 - 2	7.14 to 6.64	Fill	9.64	3.7	5.9	17.8	2.78	**474**	**5,400**	**19,000**	1.24	256	<0.044	9.94	104	0.298	0.963	489	8.5	<0.44	<0.39	<0.44	<0.55	<0.055
	UPD-5A-0-2	10/18/2006	0 - 2	8.64 to 6.64	Fill				11.1	3.18	**328**	**3,200**	**12,000**	0.753	202	0.55	9.65	75	0.398	1.33	438	--	<0.48	<0.42	<0.48	<0.6	<0.06
	UPD-5A-4-4.5	10/18/2006	4 - 4.5	4.64 to 4.14	YBM - upper				6.09	0.539	50.1	**340**	**1,400**	<0.685	232	<0.055	19.1	30.7	0.316	0.848	122	**240**	<0.55	<0.48	<0.55	<0.69	<0.069
	UPD-5-5-5.5	10/16/2006	5 - 5.5	3.64 to 3.14	YBM - lower		na	na	6.07	0.619	10	<7.2	<36	<0.714	299	<0.057	14.1	35.6	<0.12	1.44	115	<0.34	<0.57	<0.5	<0.57	<0.71	<0.071
	UPD-5A-7.5-8	10/18/2006	7.5 - 8	1.14 to 0.64	YBM - lower				2.37	0.216	7.54	22	250	<0.641	263	<0.051	17.7	30.9	<0.107	0.42	84.2	<0.29	<0.51	<0.45	<0.51	<0.64	<0.064
UPD-6	UPD-6-0-3.5	10/18/2006	0 - 3.5	9.87 to 6.37	Fill	9.87	6.3	3.6	**70.1**	3.49	**344**	**570**	**2,000**	1.91	357	0.073	10.5	115	0.441	2.68	561	--	<0.43	<0.38	<0.43	<0.54	**0.17**
	UPD-6-1.5-2	10/18/2006	1.5 - 2	8.37 to 7.87	Fill				--	--	--	--	--	--	--	--	--	--	--	--	--	<0.23	--	--	--	<0.00094	--
	UPD-6-3-3.5	10/18/2006	3 - 3.5	6.87 to 6.37	Fill				8.45	<0.114	10.6	13	35	<0.568	110	0.31	19.2	60.7	<0.095	0.325	103	<0.24	<0.46	<0.4	<0.46	<0.57	<0.057
UPD-7	UPD-7-0-2	10/18/2006	0 - 2	9.67 to 7.67	Fill	9.67	7.1	2.6	**145**	**6.91**	**469**	**120**	**410**	3.85	161	1	8.96	96.9	0.198	1.25	660	--	<0.43	<0.37	<0.43	<0.54	**0.14**
	UPD-7-2-2.5	10/18/2006	2 - 2.5	7.67 to 7.17	Fill				**56.3**	0.912	50.3	6.5	35	<0.556	118	0.24	14.1	65	0.108	0.605	268	<0.25	<0.44	<0.39	<0.44	<0.56	<0.056
	UPD-7-2.5-3	10/18/2006	2.5 - 3	7.17 to 6.67	YBM - upper		na	na	4.91	0.542	7.04	<6.7	<34	<0.667	174	<0.054	10.9	25	<0.112	0.895	78.4	<0.3	<0.54	<0.47	<0.54	<0.67	<0.067
UPD-8	UPD-8-0-2	10/17/2006	0 - 2	9.5 to 7.5	Fill	9.50	7.0	2.5	**48.4**	3.71	**258**	**100**	**500**	1.29	103	0.29	11.7	79.5	0.151	0.815	395	--	<0.42	<0.37	<0.42	<0.52	<0.052
	UPD-8-2-2.5	10/17/2006	2 - 2.5	7.5 to 7	Fill				15.5	0.233	25.4	<5.9	<30	<0.588	180	0.33	24.9	66.8	<0.098	1.05	148	<0.24	<0.47	<0.41	<0.47	<0.59	<0.059
	UPD-8-2.5-3	10/17/2006	2.5 - 3	7 to 6.5	YBM - upper		na	na	3.97	0.401	8.72	<6.7	<34	<0.658	180	<0.053	8.88	23.1	<0.11	0.459	72.8	<0.33	<0.53	<0.46	<0.53	<0.66	<0.066
UPD-9	UPD-9-0-2	10/17/2006	0 - 2	9.06 to 7.06	Fill	9.06	6.6	2.5	11.7	**6.57**	**579**	56	260	0.612	103	0.32	10.4	68.7	0.195	1.07	828	--	<0.42	<0.37	<0.42	<0.53	<0.053
	UPD-9-2-2.5	10/17/2006	2 - 2.5	7.06 to 6.56	Fill				8.76	<0.12	11.7	<6	<30	<0.602	129	0.27	22.9	66.3	<0.101	0.304	115	<0.25	<0.48	<0.42	<0.48	<0.6	<0.06
	UPD-9-2.5-3	10/17/2006	2.5 - 3	6.56 to 6.06	YBM - upper		na	na	3.84	0.495	10	<7	<35	<0.694	224	<0.056	11.4	32.4	<0.116	0.857	106	<0.35	<0.56	<0.49	<0.56	<0.7	<0.07
UPRR Parcel D Site-specific Soil Cleanup Goals									**24**	**5.6**	**150**	**100**	**410**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**4,600**	**na**	**na**	**na**	**na**	**na**	**na**

TABLE 3-2
RATIONALE FOR EXTENT OF EXCAVATION
UPRR Parcel D
Emeryville, California

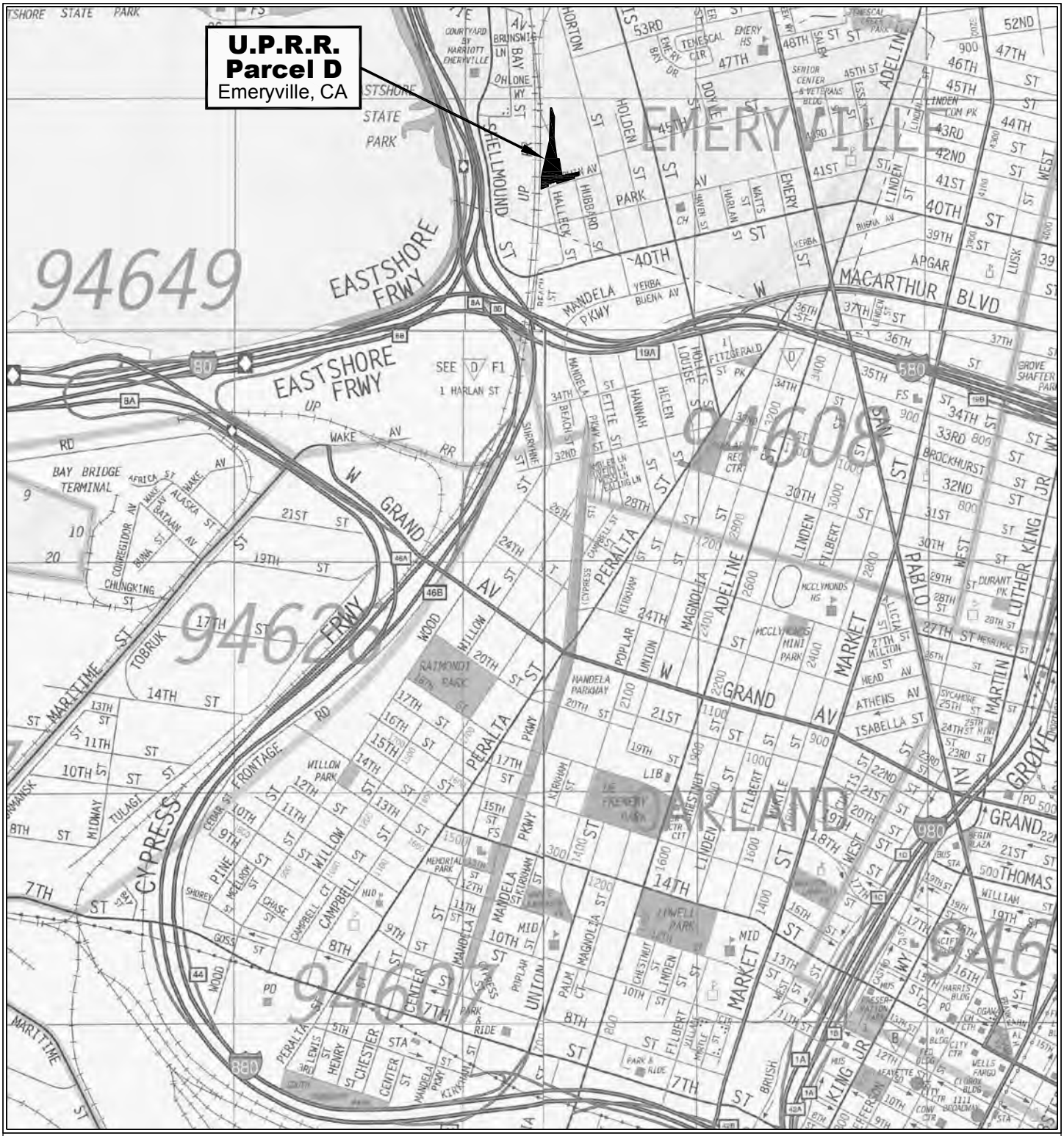
Sample Location	Sample ID	Sample Date	Sample Depth (ft bgs) (a)	Sample Elevation (ft msl)	Lithologic Unit	Ground Surface Elevation (ft msl)	Proposed Excavation Elevation (ft msl)	Excavation Thickness (ft)	Analytical Results (mg/kg in dry weight)																
									Primary COCs (b)					Other COCs (c, d)											
									Arsenic	Cadmium	Lead	TPH-d	TPH-mo	Antimony	Barium	Hex Chromium	Cobalt	Copper	Mercury	Molybdenum	Zinc	TPH-g	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(a)Fluoranthene	1,4-Dichlorobenzene	Aroclor 1254
UPD-10	UPD-10-0-2.5	10/17/2006	0 - 2.5	9.23 to 6.73	Fill	9.23	6.2	3.0	**57.8**	**9.99**	**401**	93	**440**	1.43	187	0.57	11.4	104	0.465	1.58	1,340	--	<0.42	<0.37	<0.42	<0.53	<0.053
	UPD-10-2.5-3	10/17/2006	2.5 - 3	6.73 to 6.23	Fill				23.5	3.95	93	<6.7	<34	<0.667	208	0.11	20.5	79.8	<0.112	0.936	225	<0.26	<0.54	<0.47	<0.54	<0.67	<0.067
	UPD-10-6.5-7	10/17/2006	6.5 - 7	2.73 to 2.23	YBM - lower		na	na	6.88	0.513	11	<6.8	<34	<0.685	371	0.47	25.3	36.9	<0.115	0.669	114	<0.37	<0.54	<0.48	<0.54	<0.68	<0.068
UPD-11	UPD-11-0-2.5	10/18/2006	0 - 2.5	9.79 to 7.29	Fill	9.79	6.7	3.1	19.3	**10**	**307**	**230**	**870**	0.685	152	0.52	11.8	152	0.156	1.83	1,020	--	<0.42	<0.37	<0.42	<0.52	<0.052
	UPD-11-2.5-3	10/18/2006	2.5 - 3	7.29 to 6.79	Fill				**66.9**	4.6	**365**	30	140	1.73	131	0.19	18.7	87.2	0.184	0.966	481	<0.25	<0.49	<0.43	<0.49	<0.62	<0.061
	UPD-11-4-4.5	10/18/2006	4 - 4.5	5.79 to 5.29	YBM - upper		na	na	7.35	0.711	17.9	<7.1	<36	<0.704	213	0.1	11.3	36.3	<0.118	0.802	122	<0.34	<0.57	<0.5	<0.57	<0.71	<0.071
UPD-12	UPD-12-0-2.5	10/17/2006	0 - 2.5	9.41 to 6.91	Fill	9.41	6.5	2.9	**98.9**	**6.78**	**301**	82	**410**	0.766	157	0.51	12.8	84.2	0.171	0.789	501	--	<0.43	<0.38	<0.43	<0.54	<0.054
	UPD-12-2-2.5	10/17/2006	2 - 2.5	7.41 to 6.91	Fill				--	--	--	--	--	--	--	--	--	--	--	--	--	<0.238	--	--	--	<0.0009	--
	UPD-12-4.5-5	10/17/2006	4.5 - 5	4.91 to 4.41	YBM - upper		na	na	7.05	0.447	14.1	62	<34	<0.685	236	<0.055	12.7	32	<0.115	0.653	110	0.67	<0.54	<0.48	<0.54	<0.68	<0.068
UPD-13	UPD-13-0-2	10/17/2006	0 - 2	8.13 to 6.13	Fill	8.88	6.1	2.8	**70.9**	1.41	112	**110**	**420**	<0.568	132	0.13	17.7	64.8	0.134	0.441	228	--	<0.45	<0.4	<0.45	<0.57	<0.057
	UPD-13-1-1.5	10/17/2006	1 - 1.5	7.13 to 6.63	Fill				--	--	--	--	--	--	--	--	--	--	--	--	--	<0.227	--	--	--	<0.001	--
	UPD-13-3-3.5	10/17/2006	3 - 3.5	5.13 to 4.63	YBM - upper		na	na	4.76	0.606	9.22	<7.1	<35	<0.704	194	0.065	11	29.9	0.12	1.34	127	<0.35	<0.56	<0.49	<0.56	<0.7	<0.07
	UPD-13-6-6.5	10/17/2006	6 - 6.5	2.13 to 1.63	YBM - lower				1.99	0.166	5.88	<6.2	33	<0.617	167	<0.05	4.27	23.6	<0.103	0.324	62.9	<0.27	<0.5	<0.43	<0.5	<0.62	<0.062
UPD-14	UPD-14-0-2	10/17/2006	0 - 2	8.54 to 6.54	Fill	9.29	6.5	2.8	**29.9**	2.73	**175**	18	120	1.31	**863**	0.45	34.3	**411**	0.285	6.47	2,970	--	<0.46	<0.4	<0.46	**1.3**	<0.057
	UPD-14-1.5-2	10/17/2006	1.5 - 2	7.04 to 6.54	Fill				--	--	--	--	--	--	--	--	--	--	--	--	--	<0.229	--	--	--	<0.0009	--
	UPD-14-2-2.5	10/17/2006	2 - 2.5	6.54 to 6.04	YBM - upper		na	na	6.68	0.722	15.4	<7.5	<37	<0.746	235	<0.06	12.9	36.2	0.528	0.959	115	<0.37	<0.6	<0.52	<0.6	<0.75	<0.075
UPD-15	UPD-15-0-2.5	10/17/2006	0 - 2.5	9.31 to 6.81	Fill	9.31	na (g)	na (g)	20.3	0.337	31.3	12	120	<0.556	90	0.22	19.2	61.6	0.105	0.528	173	--	<0.45	<0.39	<0.45	<0.56	<0.056
	UPD-15-0.75-1.25	10/17/2006	0.75 - 1.25	8.56 to 8.06	Fill				--	--	--	--	--	--	--	--	--	--	--	--	--	<0.234	--	--	--	<0.001	--
	UPD-15-2.5-3	10/17/2006	2.5 - 3	6.81 to 6.31	YBM - upper				6.26	0.621	12	<7	<35	<0.694	255	<0.056	14	37.5	<0.116	0.979	114	<0.36	<0.56	<0.49	<0.56	<0.7	<0.07
UPD-16	UPD-16-0.5-1	10/18/2006	0.5 - 1	7.39 to 6.89	YBM - upper	8.64	6.4	2.2	7.22	0.823	**480**	**720**	**1,800**	**11.7**	154	0.094	11.6	80.5	0.316	0.631	215	<0.27	<0.49	<0.43	<0.49	<0.61	<0.061
	UPD-16-1.5-2	10/18/2006	1.5 - 2	6.39 to 5.89	YBM - upper		na	na	4.69	0.621	17.1	<6.9	<35	<0.694	266	<0.055	9.3	37.5	<0.116	0.7	141	<0.32	<0.55	<0.48	<0.55	<0.69	<0.067
	UPD-16-4-4.5	10/18/2006	4 - 4.5	3.89 to 3.39	YBM - lower				16.2	0.742	6.87	<6.4	<32	<0.633	247	<0.051	15	21.3	<0.106	0.975	71.5	<0.27	<0.51	<0.44	<0.51	<0.64	<0.063
UPD-17	UPD-17-0.5-1	10/18/2006	0.5 - 1	7.5 to 7	YBM - upper	8.75	na	na	6.2	0.611	25.7	<7.1	<36	<0.704	252	<0.057	13.6	37.7	0.721	1.14	120	<0.38	<0.57	<0.5	<0.57	<0.71	<0.071
	UPD-17-2.5-3	10/18/2006	2.5 - 3	5.5 to 5	YBM - upper				4.98	0.212	10.3	<6.7	<34	<0.676	208	0.17	14.2	30	<0.113	0.529	86.3	<0.28	<0.54	<0.47	<0.54	<0.67	<0.067
UPD-18	UPD-18-0.5-1	10/18/2006	0.5 - 1	7.65 to 7.15	YBM - upper	8.90	na	na	3.71	0.203	61.2	12	32	<0.588	376	<0.047	11.4	32.6	0.202	0.503	80.1	<0.25	*0.49*	*0.5*	*0.68*	<0.58	<0.058
	UPD-18-2-2.5	10/18/2006	2 - 2.5	6.15 to 5.65	YBM - lower				7.33	0.339	10.5	<6.6	<33	<0.649	216	0.1	13.9	31.5	0.111	0.763	90.5	<0.28	<0.4	<0.35	<0.4	<0.5	<0.065
UPD-19	UPD-19-0.25-0.75	10/17/2006	0.25 - 0.75	8.11 to 7.61	YBM - upper	9.11	na	na	3.85	0.552	23.2	<6.9	<34	<0.685	226	0.16	9.85	35.1	0.33	0.705	122	<0.33	<0.55	<0.48	<0.55	<0.69	<0.069
	UPD-19-3-3.5	10/17/2006	3 - 3.5	5.36 to 4.86	YBM - lower				2.92	0.288	5.9	<6.2	<31	<0.617	169	0.11	5.22	16.4	<0.103	0.401	74	<0.27	<0.5	<0.43	<0.5	<0.62	<0.062
UPRR Parcel D Site-specific Soil Cleanup Goals									**24**	**5.6**	**150**	**100**	**410**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**4,600**	**na**	**na**	**na**	**na**	**na**	**na**

TABLE 3-2
RATIONALE FOR EXTENT OF EXCAVATION
UPRR Parcel D
Emeryville, California

Sample Location	Sample ID	Sample Date	Sample Depth (ft bgs) (a)	Sample Elevation (ft msl)	Lithologic Unit	Ground Surface Elevation (ft msl)	Proposed Excavation Elevation (ft msl)	Excavation Thickness (ft)	Analytical Results (mg/kg in dry weight)																		
									Primary COCs (b)					Other COCs (c, d)													
									Arsenic	Cadmium	Lead	TPH-d	TPH-mo	Antimony	Barium	Hex Chromium	Cobalt	Copper	Mercury	Molybdenum	Zinc	TPH-g	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(a)Fluoranthene	1,4-Dichlorobenzene	Aroclor 1254
UPD-20	UPD-20-0-0.5	10/18/2006	0 - 0.5	6.43 to 5.93	Fill	6.43	5.9	0.5	**46.6**	4.41	**350**	17	59	2.86	187	0.23	11.4	90.9	0.328	0.91	540	<0.23	<0.44	<0.38	<0.44	<0.54	**0.24**
	UPD-20-1.5-2	10/18/2006	1.5 - 2	4.93 to 4.43	YBM - upper		na	na	7.79	0.379	12.1	<5.8	<29	<0.575	163	0.22	14.6	21.3	<0.096	0.883	66	<0.26	<0.46	<0.4	<0.46	<0.58	<0.058
UPRR Parcel D Site-specific Soil Cleanup Goals									**24**	**5.6**	**150**	**100**	**410**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**4,600**	**na**	**na**	**na**	**na**	**na**	**na**

Abbreviations:
<0.50 = Compound not detected at or above indicated laboratory reporting limit
CHHSL = California Human Health Screening Level (California EPA, dated January 2005, Table 1--California Human Health Screening Levels for Soil and Comparison to Other Potential Environmental Concerns)
COCs = Chemicals of Concern
ESLs = Regional Water Quality Control Board - San Francisco Bay Region, Environmental Screening Levels, Residential shallow soil less than 3 meters and groundwater as a non-drinking water resource (November 2007)
ft bgs = feet below ground surface
ft msl = feet mean seal level
mg/kg = Milligrams per kilogram
na = not applicable or not available
ND = not detected
NU = not usable (see Table 2-2)
PRG = US EPA Region IX Preliminary Remediation Goals for Soil at Residential Sites, December 2004
LBNL = Lawrence Berkeley National Laboratory
YBM = Young Bay Mud

Notes:
(a) Sampling depths at each borehole location do not include the thickness of overlying asphalt or concrete layers that range from approximately 0.5 to 1-foot in thickness
(b) Concentrations of primary COCs which equal or exceed UPRR Parcel D Site-specific Soil Cleanup Goals are shown in **bold** and are shaded in gray.
(c) Concentrations of other COCs which equal or exceed the CHHSLs, PRGs, or ESLs are shown in **bold**.
(d) Concentrations of other metal COCs which equal or exceed LBNL background metal concentrations (LBNL et al, 2002) are underlined.
(e) LBNL and Parsons Engineering Science, Inc. Analysis of Background Distributions of Metals in Soil at Lawrence Berkeley National Laboratory, June 2002.
(f) Proposed excavation elevation at UPD-2 is 7.7 ft msl and the excavation thickness is 1 ft, which is equivalent to the fill thickness. Soil samples at UPD-2 were only collected from the YBM.
(g) Excavation at UPD-15 is not proposed because concentrations of zinc is soil at UPD-15 of 173 mg/kg only slightly exceeded the soil cleanup goal for zinc of 140 mg/kg and zinc was the only COC in soil to exceed soil cleanup goals at that location.



Notes:

1. All locations are approximate.
2. Basemap source: The Thomas Guide, Bay Area Metro, 2007.

N

0 1600 3200

(Approximate Scale in Feet)

Erler & Kalinowski, Inc.

Site Location Map

UPRR Parcel D
Emeryville, CA
March 2008
EKI A60021.00

Figure 1-1



20080317.15073839 G:\A60021.00\Mar08\Figure 1-2.dwg Layout1

Erler & Kalinowski, Inc.

2005 Aerial Photo and Neighboring Properties

UPRR Parcel D
Emeryville, CA
March 2008
EKI A60021.00

Figure 1-2



N

0 100 200

(Approximate Scale in Feet)

Legend:

- Approximate Subject Property Boundary
- Storm Sewer
- Sanitary Sewer
- Soil Sampling Location
- Soil and Grab Groundwater Sampling Location
- Approximate Location of Monitoring Wells (Sherwin-Williams)
- 8.0 — Contour of Approximate Ground Surface Elevation (ft msl)
- (9.23) — Approximate Ground Surface Elevation (ft msl)
- A — A' — Cross-Section Location

Abbreviations:

ft msl = feet above mean sea level

UPRR = Union Pacific Railroad

Notes:

1. All locations are approximate.
2. Basemap source: Pacific Aerial Surveys, Oakland, CA., dated 9 March 2005.
3. Ground surface topography approximated based on elevation of sampling locations.

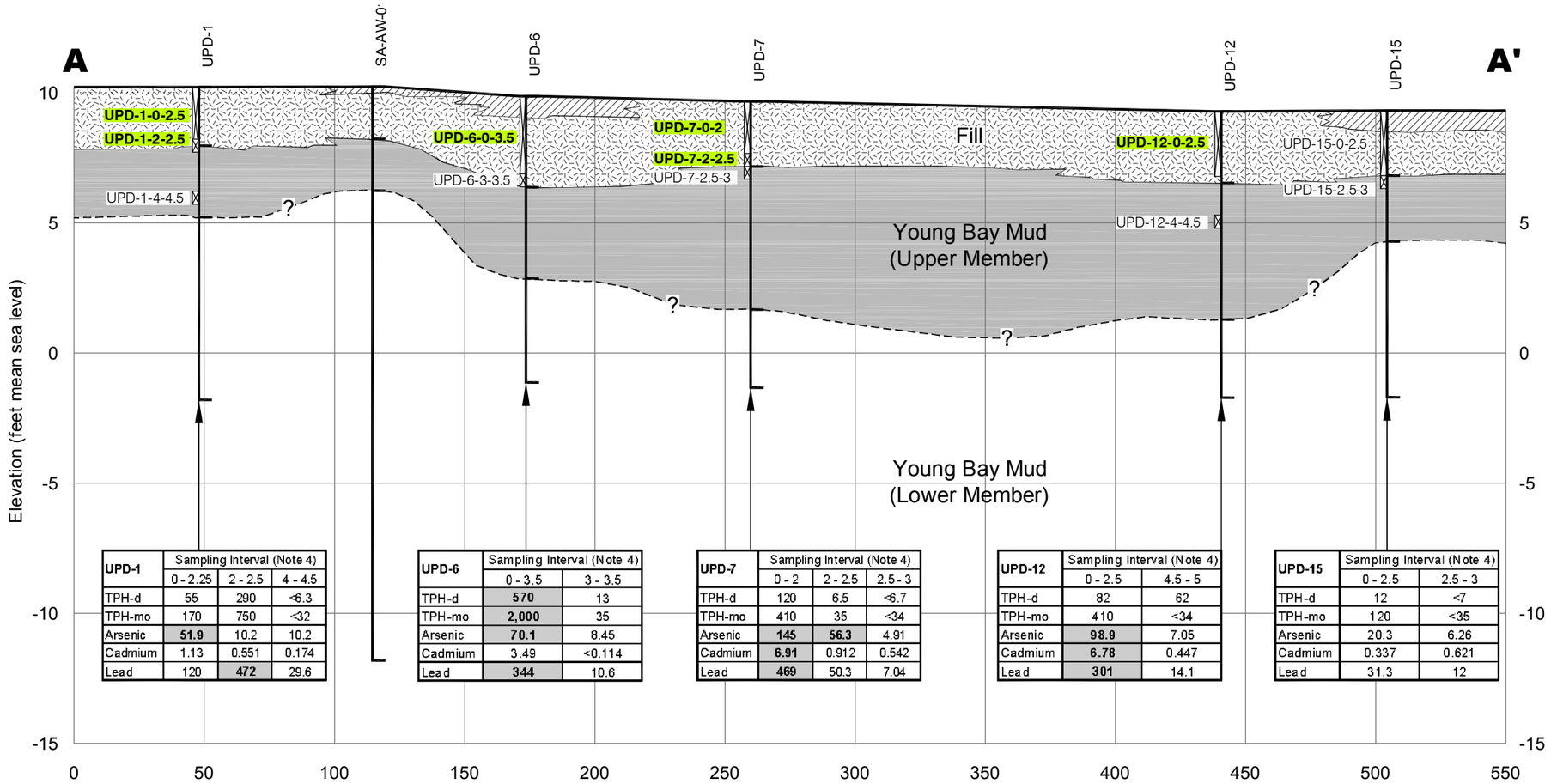
Erler & Kalinowski, Inc.

Geologic Cross-Section Locations and Approximate Ground Surface Topography

UPRR Parcel D
Emeryville, CA
March 2008
EKI A60021.00

Figure 2-1

20080317.15112064 C:\A60021.00\Word\$\Figure 2-1.dwg Layout1



UPD-1	Sampling Interval (Note 4)		
	0 - 2.25	2 - 2.5	4 - 4.5
TPH-d	55	290	<6.3
TPH-mo	170	750	<32
Arsenic	**51.9**	10.2	10.2
Cadmium	1.13	0.551	0.174
Lead	120	**472**	29.6

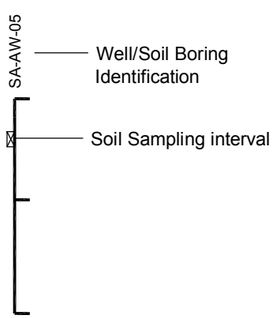
UPD-6	Sampling Interval (Note 4)	
	0 - 3.5	3 - 3.5
TPH-d	**570**	13
TPH-mo	**2,000**	35
Arsenic	**70.1**	8.45
Cadmium	3.49	<0.114
Lead	**344**	10.6

UPD-7	Sampling Interval (Note 4)		
	0 - 2	2 - 2.5	2.5 - 3
TPH-d	120	6.5	<6.7
TPH-mo	410	35	<34
Arsenic	**145**	**56.3**	4.91
Cadmium	**6.91**	0.912	0.542
Lead	**469**	50.3	7.04

UPD-12	Sampling Interval (Note 4)	
	0 - 2.5	4.5 - 5
TPH-d	82	62
TPH-mo	410	<34
Arsenic	**98.9**	7.05
Cadmium	**6.78**	0.447
Lead	**301**	14.1

UPD-15	Sampling Interval (Note 4)	
	0 - 2.5	2.5 - 3
TPH-d	12	<7
TPH-mo	120	<35
Arsenic	20.3	6.26
Cadmium	0.337	0.621
Lead	31.3	12

Legend:



Explanation:

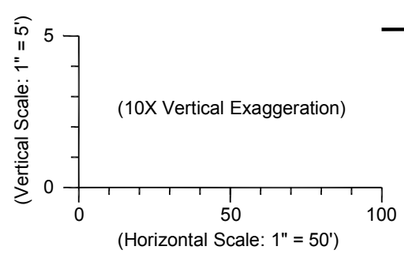
- Asphalt and/or Concrete
- Fill (Gravel and Sand)
- Young Bay Mud (Upper Member) Generally Consists of Silty Clay
- Young Bay Mud (Lower Member) Generally Consists of Silty Clay to Clayey Silt with Fine to Medium Sand and Gravel

Notes:

1. All locations are approximate.
2. Sample names in **bold font** and shaded green indicate one or more COCs were above site cleanup goals.
3. Sample names in regular font and not shaded indicate no COCs were above site cleanup goals.
4. Sampling interval is in feet below ground surface for sampling locations where asphalt or concrete was not present at ground surface. Sampling interval is in feet below concrete/ asphalt surface for sampling locations where asphalt or concrete was present at ground surface.
5. Concentrations in milligrams per kilogram. Concentrations that exceed the site cleanup goal are in **bold** and shaded in grey. (See Table 3-2).

Abbreviations:

COCs = chemicals of concern
ft bgs = chemicals of concern
TPH = total petroleum hydrocarbons
TPH-d = total petroleum hydrocarbons as diesel
TPH-mo = total petroleum hydrocarbons as motor oil

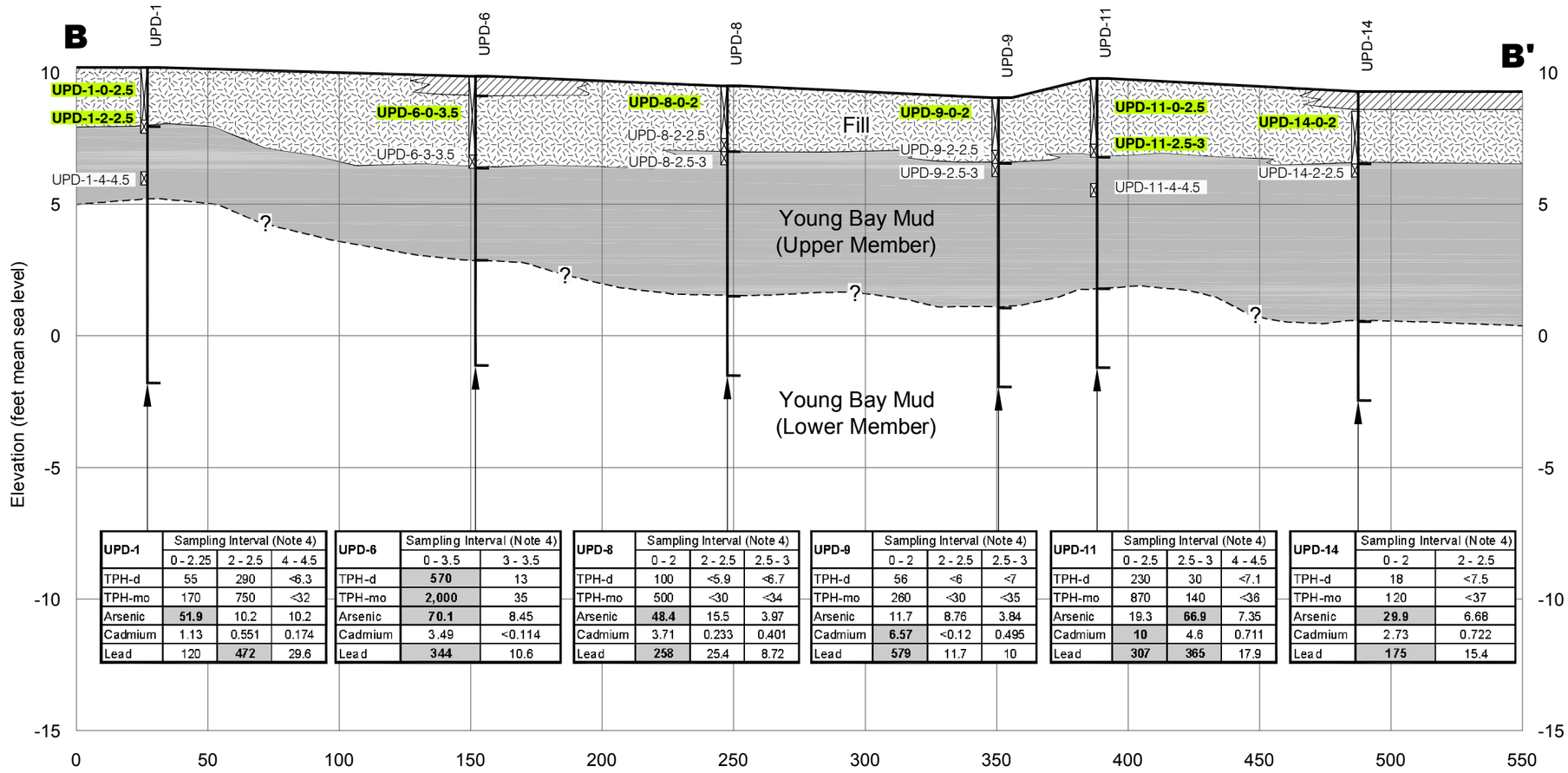


Erler & Kalinowski, Inc.

Geologic-Cross Section A - A'

UPRR Parcel D
Emeryville, CA
March 2008
EKI A60021.00

Figure 2-2



UPD-1	Sampling Interval (Note 4)		
	0 - 2.25	2 - 2.5	4 - 4.5
TPH-d	55	290	<6.3
TPH-mo	170	750	<32
Arsenic	**51.9**	10.2	10.2
Cadmium	1.13	0.551	0.174
Lead	120	**472**	29.6

UPD-6	Sampling Interval (Note 4)	
	0 - 3.5	3 - 3.5
TPH-d	**570**	13
TPH-mo	**2,000**	35
Arsenic	**70.1**	8.45
Cadmium	3.49	<0.114
Lead	**344**	10.6

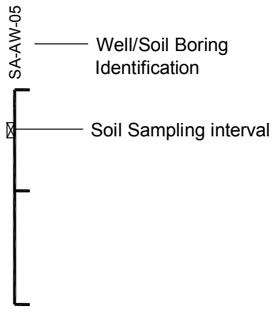
UPD-8	Sampling Interval (Note 4)		
	0 - 2	2 - 2.5	2.5 - 3
TPH-d	100	<5.9	<6.7
TPH-mo	500	<30	<34
Arsenic	**48.4**	15.5	3.97
Cadmium	3.71	0.233	0.401
Lead	**258**	25.4	8.72

UPD-9	Sampling Interval (Note 4)		
	0 - 2	2 - 2.5	2.5 - 3
TPH-d	56	<6	<7
TPH-mo	260	<30	<35
Arsenic	11.7	8.76	3.84
Cadmium	**6.57**	<0.12	0.495
Lead	**579**	11.7	10

UPD-11	Sampling Interval (Note 4)		
	0 - 2.5	2.5 - 3	4 - 4.5
TPH-d	230	30	<7.1
TPH-mo	870	140	<36
Arsenic	19.3	**66.9**	7.35
Cadmium	**10**	4.6	0.711
Lead	**307**	**365**	17.9

UPD-14	Sampling Interval (Note 4)	
	0 - 2	2 - 2.5
TPH-d	18	<7.5
TPH-mo	120	<37
Arsenic	**29.9**	6.68
Cadmium	2.73	0.722
Lead	**175**	15.4

Legend:



Explanation:

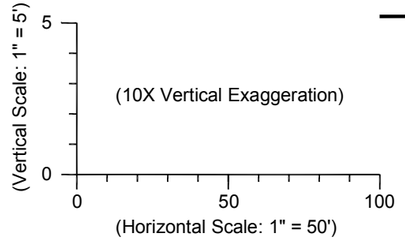
- Asphalt and/or Concrete
- Fill (Gravel and Sand)
- Young Bay Mud (Upper Member) Generally Consists of Silty Clay
- Young Bay Mud (Lower Member) Generally Consists of Silty Clay to Clayey Silt with Fine to Medium Sand and Gravel

Notes:

1. All locations are approximate.
2. Sample names in **bold font** and shaded green indicate one or more COCs were above site cleanup goals.
3. Sample names in regular font and not shaded indicate no COCs were above site cleanup goals.
4. Sampling interval is in feet below ground surface for sampling locations where asphalt or concrete was not present at ground surface. Sampling interval is in feet below concrete/ asphalt surface for sampling locations where asphalt or concrete was present at ground surface.
5. Concentrations in milligrams per kilogram. Concentrations that exceed the site cleanup goal are in **bold** and shaded in grey. (See Table 3-2).

Abbreviations:

COCs = chemicals of concern
ft bgs = chemicals of concern
TPH = total petroleum hydrocarbons
TPH-d = total petroleum hydrocarbons as diesel
TPH-mo = total petroleum hydrocarbons as motor oil

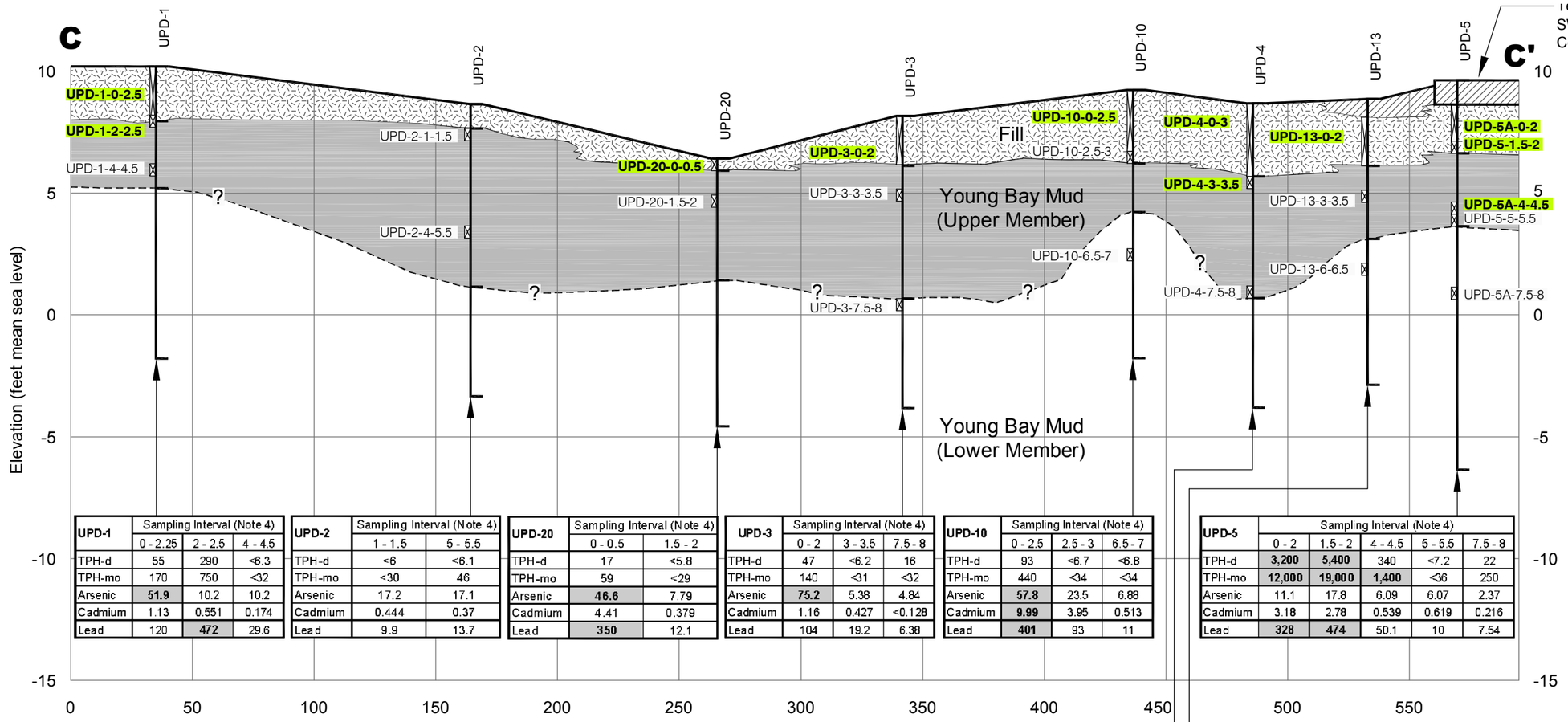


Erler & Kalinowski, Inc.

Geologic-Cross Section B - B'

UPRR Parcel D
Emeryville, CA
March 2008
EKI A60021.00

Figure 2-3



UPD-1	Sampling Interval (Note 4)		
	0 - 2.25	2 - 2.5	4 - 4.5
TPH-d	55	290	<6.3
TPH-mo	170	750	<32
Arsenic	**51.9**	10.2	10.2
Cadmium	1.13	0.551	0.174
Lead	120	**472**	29.6

UPD-2	Sampling Interval (Note 4)	
	1 - 1.5	5 - 5.5
TPH-d	<6	<6.1
TPH-mo	<30	46
Arsenic	17.2	17.1
Cadmium	0.444	0.37
Lead	9.9	13.7

UPD-20	Sampling Interval (Note 4)	
	0 - 0.5	1.5 - 2
TPH-d	17	<5.8
TPH-mo	59	<29
Arsenic	**46.6**	7.79
Cadmium	4.41	0.379
Lead	**350**	12.1

UPD-3	Sampling Interval (Note 4)		
	0 - 2	3 - 3.5	7.5 - 8
TPH-d	47	<6.2	16
TPH-mo	140	<31	<32
Arsenic	**75.2**	5.38	4.84
Cadmium	1.16	0.427	<0.128
Lead	104	19.2	6.38

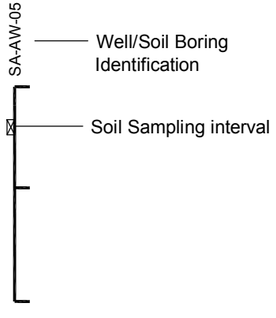
UPD-10	Sampling Interval (Note 4)		
	0 - 2.5	2.5 - 3	6.5 - 7
TPH-d	93	<6.7	<6.8
TPH-mo	440	<34	<34
Arsenic	**57.8**	23.5	6.88
Cadmium	**9.99**	3.95	0.513
Lead	**401**	93	11

UPD-5	Sampling Interval (Note 4)				
	0 - 2	1.5 - 2	4 - 4.5	5 - 5.5	7.5 - 8
TPH-d	**3,200**	**5,400**	340	<7.2	22
TPH-mo	**12,000**	**19,000**	**1,400**	<36	250
Arsenic	11.1	17.8	6.09	6.07	2.37
Cadmium	3.18	2.78	0.539	0.619	0.216
Lead	**328**	**474**	50.1	10	7.54

UPD-4	Sampling Interval (Note 4)		
	0 - 3	3 - 3.5	7.5 - 8
TPH-d	64	<6.7	<6.5
TPH-mo	200	<33	<33
Arsenic	**26.1**	14.9	2.6
Cadmium	**8.28**	0.903	1.31
Lead	**684**	**254**	11.5

UPD-13	Sampling Interval (Note 4)		
	0 - 2	3 - 3.5	6 - 6.5
TPH-d	110	<7.1	<6.2
TPH-mo	420	<35	33
Arsenic	**70.9**	4.76	1.99
Cadmium	1.41	0.606	0.166
Lead	112	9.22	5.88

Legend:



Explanation:

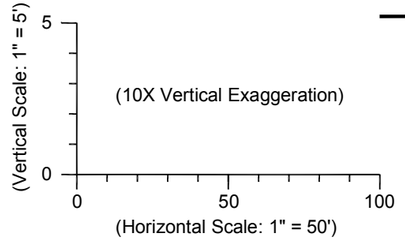
- Asphalt and/or Concrete
- Fill (Gravel and Sand)
- Young Bay Mud (Upper Member) Generally Consists of Silty Clay
- Young Bay Mud (Lower Member) Generally Consists of Silty Clay to Clayey Silt with Fine to Medium Sand and Gravel

Notes:

1. All locations are approximate.
2. Sample names in **bold font** and shaded green indicate one or more COCs were above site cleanup goals.
3. Sample names in regular font and not shaded indicate no COCs were above site cleanup goals.
4. Sampling interval is in feet below ground surface for sampling locations where asphalt or concrete was not present at ground surface. Sampling interval is in feet below concrete/ asphalt surface for sampling locations where asphalt or concrete was present at ground surface.
5. Concentrations in milligrams per kilogram. Concentrations that exceed the site cleanup goal are in **bold** and shaded in grey. (See Table 3-2).

Abbreviations:

COCs = chemicals of concern
ft bgs = chemicals of concern
TPH = total petroleum hydrocarbons
TPH-d = total petroleum hydrocarbons as diesel
TPH-mo = total petroleum hydrocarbons as motor oil

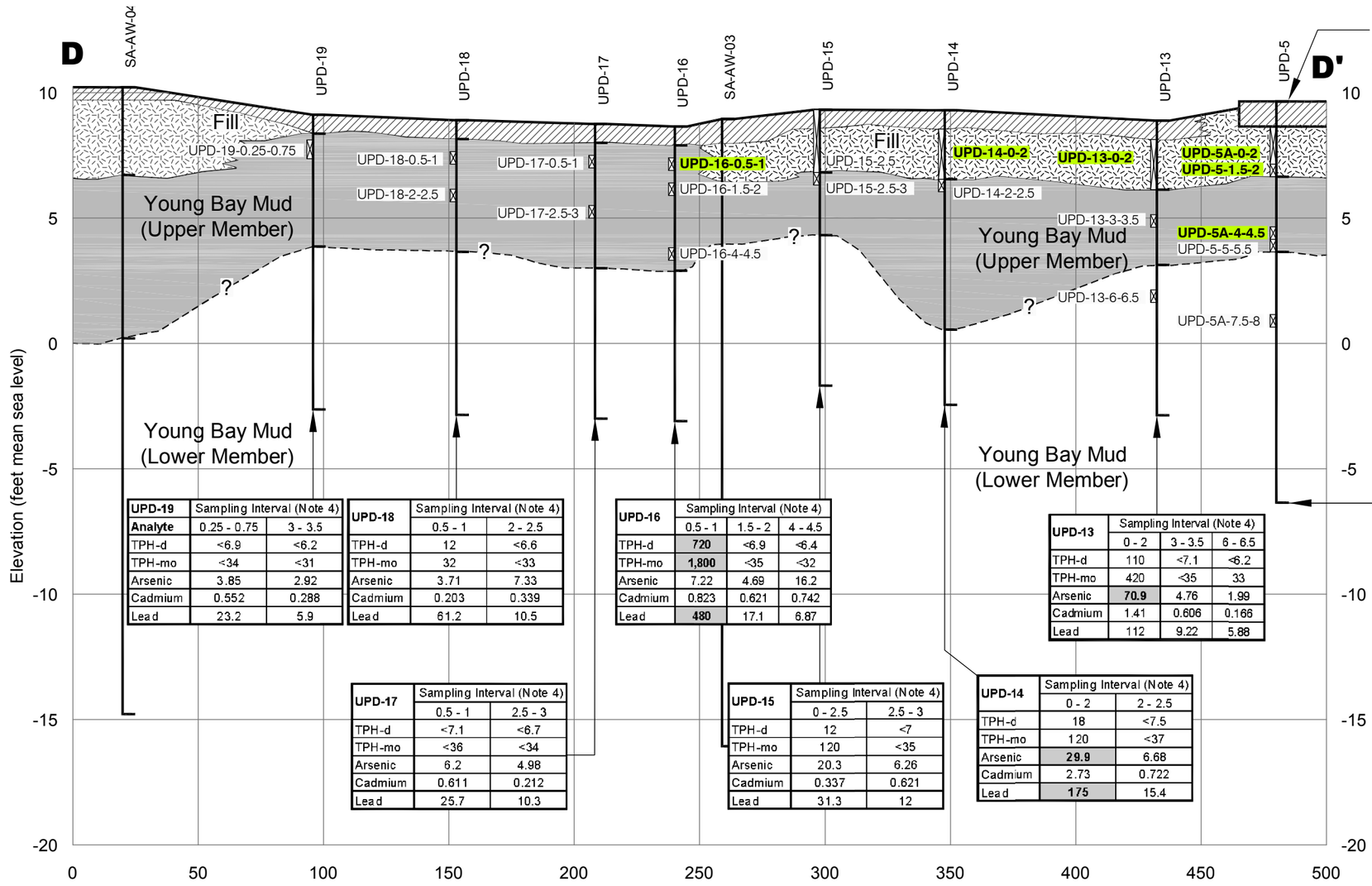


Erler & Kalinowski, Inc.

Geologic-Cross Section C - C'

UPRR Parcel D
Emeryville, CA
March 2008
EKI A60021.00

Figure 2-4



UPD-19	Sampling Interval (Note 4)	
Analyte	0.25 - 0.75	3 - 3.5
TPH-d	<6.9	<6.2
TPH-mo	<34	<31
Arsenic	3.85	2.92
Cadmium	0.552	0.288
Lead	23.2	5.9

UPD-18	Sampling Interval (Note 4)	
	0.5 - 1	2 - 2.5
TPH-d	12	<6.6
TPH-mo	32	<33
Arsenic	3.71	7.33
Cadmium	0.203	0.339
Lead	61.2	10.5

UPD-16	Sampling Interval (Note 4)		
	0.5 - 1	1.5 - 2	4 - 4.5
TPH-d	**720**	<6.9	<6.4
TPH-mo	**1,800**	<35	<32
Arsenic	7.22	4.69	16.2
Cadmium	0.823	0.621	0.742
Lead	**480**	17.1	6.87

UPD-13	Sampling Interval (Note 4)		
	0 - 2	3 - 3.5	6 - 6.5
TPH-d	110	<7.1	<6.2
TPH-mo	420	<35	33
Arsenic	**70.9**	4.76	1.99
Cadmium	1.41	0.606	0.166
Lead	112	9.22	5.88

UPD-5	Sampling Interval (Note 4)				
	0 - 2	1.5 - 2	4 - 4.5	5 - 5.5	7.5 - 8
TPH-d	**3,200**	**5,400**	340	<7.2	22
TPH-mo	**12,000**	**19,000**	**1,400**	<36	250
Arsenic	11.1	17.8	6.09	6.07	2.37
Cadmium	3.18	2.78	0.539	0.619	0.216
Lead	**328**	**474**	50.1	10	7.54

UPD-17	Sampling Interval (Note 4)	
	0.5 - 1	2.5 - 3
TPH-d	<7.1	<6.7
TPH-mo	<36	<34
Arsenic	6.2	4.98
Cadmium	0.611	0.212
Lead	25.7	10.3

UPD-15	Sampling Interval (Note 4)	
	0 - 2.5	2.5 - 3
TPH-d	12	<7
TPH-mo	120	<35
Arsenic	20.3	6.26
Cadmium	0.337	0.621
Lead	31.3	12

UPD-14	Sampling Interval (Note 4)	
	0 - 2	2 - 2.5
TPH-d	18	<7.5
TPH-mo	120	<37
Arsenic	**29.9**	6.68
Cadmium	2.73	0.722
Lead	**175**	15.4

Legend:

SA-AW-05 — Well/Soil Boring Identification

Soil Sampling interval

Explanation:

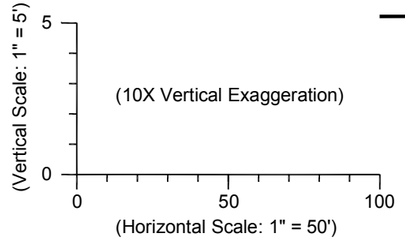
- Asphalt and/or Concrete
- Fill (Gravel and Sand)
- Young Bay Mud (Upper Member) Generally Consists of Silty Clay
- Young Bay Mud (Lower Member) Generally Consists of Silty Clay to Clayey Silt with Fine to Medium Sand and Gravel

Notes:

1. All locations are approximate.
2. Sample names in **bold font** and shaded green indicate one or more COCs were above site cleanup goals.
3. Sample names in regular font and not shaded indicate no COCs were above site cleanup goals.
4. Sampling interval is in feet below ground surface for sampling locations where asphalt or concrete was not present at ground surface. Sampling interval is in feet below concrete/ asphalt surface for sampling locations where asphalt or concrete was present at ground surface.
5. Concentrations in milligrams per kilogram. Concentrations that exceed the site cleanup goal are in **bold** and shaded in grey. (See Table 3-2).

Abbreviations:

COCs = chemicals of concern
ft bgs = chemicals of concern
TPH = total petroleum hydrocarbons
TPH-d = total petroleum hydrocarbons as diesel
TPH-mo = total petroleum hydrocarbons as motor oil



Erler & Kalinowski, Inc.

Geologic-Cross Section D - D'

UPRR Parcel D
Emeryville, CA
March 2008
EKI A60021.00

Figure 2-5



N

0 100 200

(Approximate Scale in Feet)

Legend:

- Approximate Subject Property Boundary
- Storm Sewer
- Sanitary Sewer
- Soil Sampling Location
- Soil and Grab Groundwater Sampling Location
- Approximate Location of Monitoring Wells (Sherwin-Williams)
- 6.5 — Contour of Approximate Elevation of Native Soil (ft msl)
- (6.5) — Approximate Elevation of Bottom of Artificial Fill (ft msl)
- A — A' Cross-Section Location

Abbreviations:

ft msl = feet above mean sea level

UPRR = Union Pacific Railroad

Notes:

1. All locations are approximate.
2. Basemap source: Pacific Aerial Surveys, Oakland, CA., dated 9 March 2005.

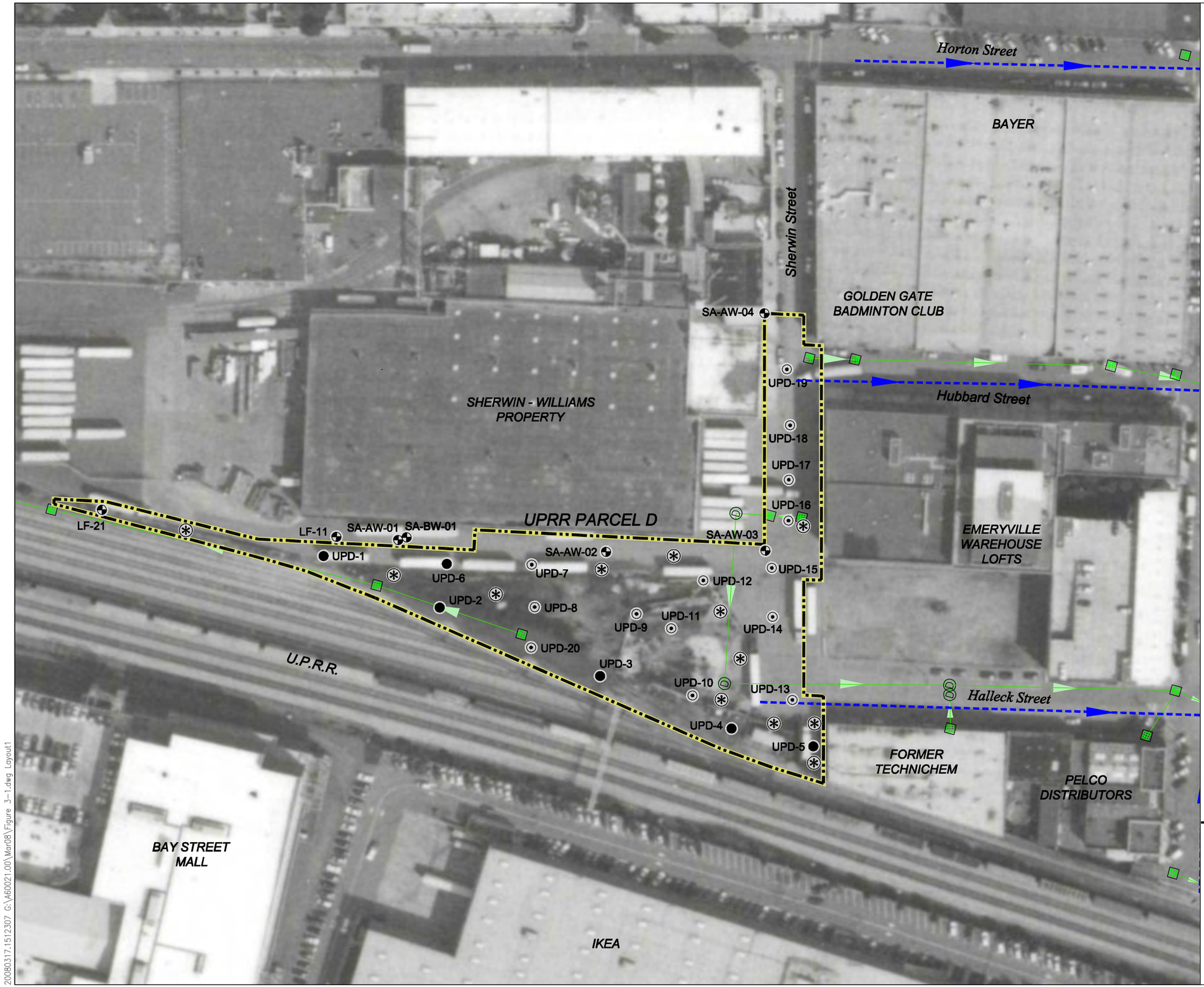
Erler & Kalinowski, Inc.

Geologic Cross-Section Locations and Bottom of Artificial Fill Elevation

UPRR Parcel D
Emeryville, CA
March 2008
EKI A60021.00

Figure 2-6

20080317.15085694 G:\A60021.00\Wor08\Figure 2-6.dwg Layout1



N

0 100 200

(Approximate Scale in Feet)

Legend:

- Approximate Subject Property Boundary
- Storm Sewer
- Sanitary Sewer
- Soil Sampling Location
- Soil and Grab Groundwater Sampling Location
- Approximate Location of Monitoring Wells (Sherwin-Williams)
- Proposed Additional Delineation Soil Sampling Location

Notes:

1. All locations are approximate.
2. Basemap source: Pacific Aerial Surveys, Oakland, CA., dated 9 March 2005.

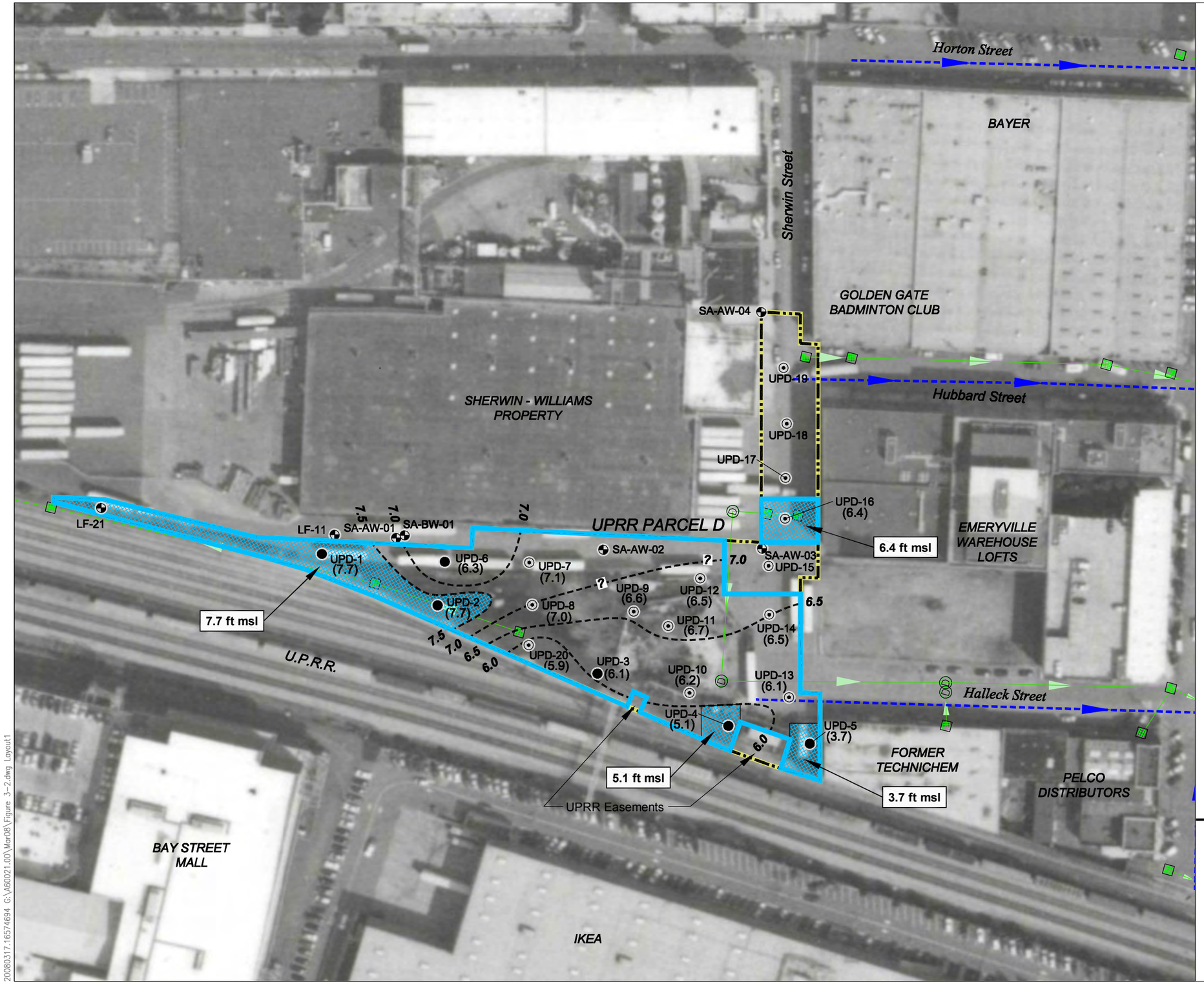
Erler & Kalinowski, Inc.

Existing On-Site Sampling Locations and Proposed Additional Delineation Soil Sampling Locations

UPRR Parcel D
Emeryville, CA
March 2008
EKI A60021.00

Figure 3-1

20080317.1512307 G:\A60021.00\Mar08\Figure 3-1.dwg Layout1



N

0 100 200

(Approximate Scale in Feet)

Legend:

- Approximate Subject Property Boundary
- Storm Sewer
- Sanitary Sewer
- Soil Sampling Location
- Soil and Grab Groundwater Sampling Location
- Approximate Location of Monitoring Wells (Sherwin-Williams)
- 6.5 — Proposed Excavation Elevation Based on Bottom of Artificial Fill Elevation (ft msl)
- (6.5) — Proposed Excavation Elevation at each Sampling Location (ft msl)
- Lateral Extent of Excavation
- Proposed Area of Excavation to a Uniform Elevation

Abbreviations:

ft msl	= feet above mean sea level
UPRR	= Union Pacific Railroad

Notes:

1. All locations are approximate.
2. Basemap source: Pacific Aerial Surveys, Oakland, CA., dated 9 March 2005.
3. Proposed excavation elevations are subject to change based on field observations of bottom of artificial fill and additional delineation sampling if necessary.

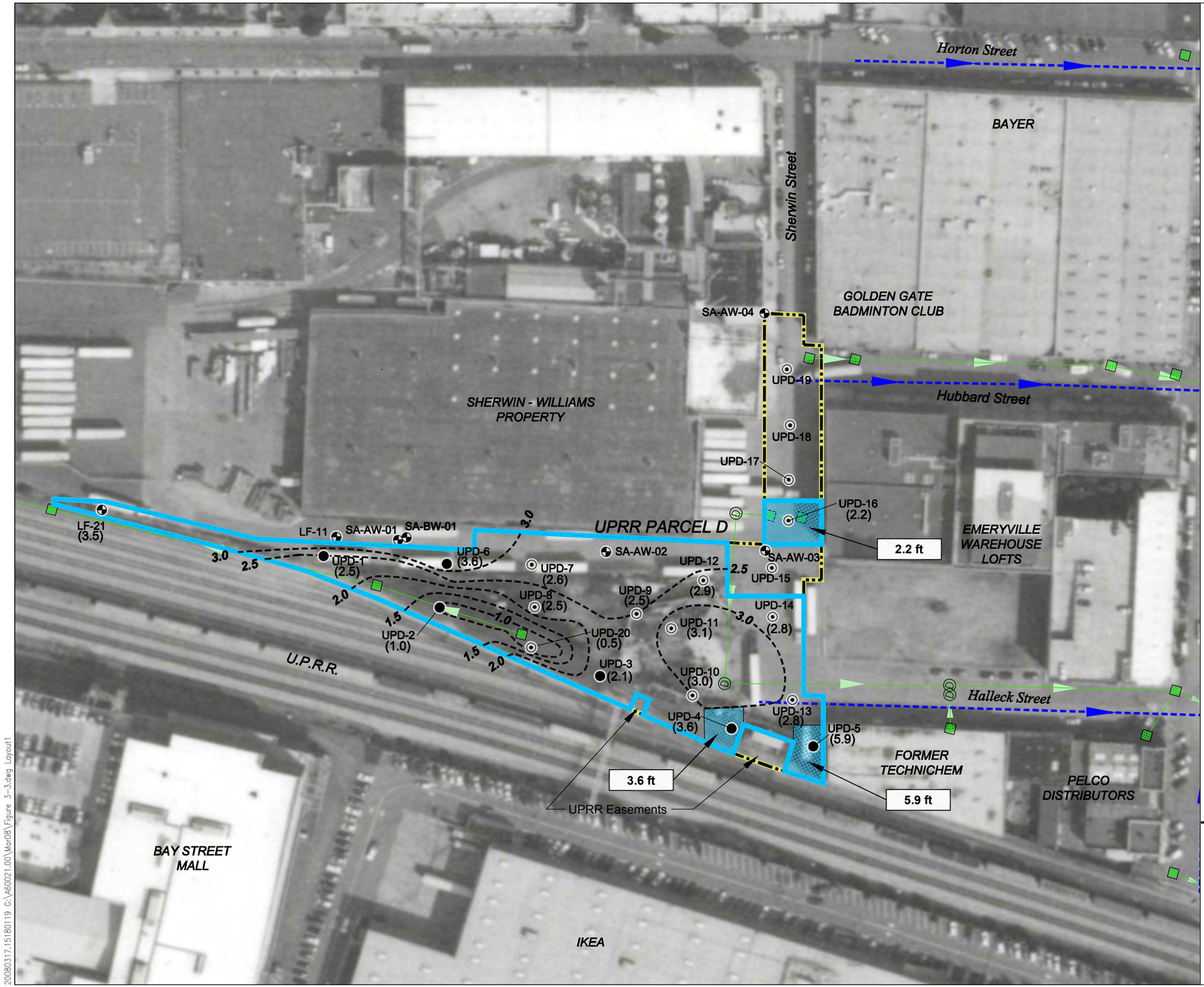
Erler & Kalinowski, Inc.

Lateral and Vertical Extents of Excavation

UPRR Parcel D
Emeryville, CA
March 2008
EKI A60021.00

Figure 3-2

20080317.16574694 G:\A60021.00\Mar08\Figure 3-2.dwg Layout1



N

0 100 200

(Approximate Scale in Feet)

Legend:

- Approximate Subject Property Boundary
- Storm Sewer
- Sanitary Sewer
- Soil Sampling Location
- Soil and Grab Groundwater Sampling Location
- Approximate Location of Monitoring Wells (Sherwin-Williams)
- 2.0 — Proposed Thickness of Excavation Contour (ft)
- (2.2) — Proposed Thickness of Excavation at each Sampling Location (ft)
- Lateral Extent of Excavation
- Proposed Area of Uniform Excavation Thickness

Abbreviations:

ft = feet
UPRR = Union Pacific Railroad

Notes:

1. All locations are approximate.
2. Basemap source: Pacific Aerial Surveys, Oakland, CA., dated 9 March 2005.
3. Proposed excavation thicknesses are subject to change based on field observations of thickness of artificial fill and additional delineation sampling if necessary.

Erler & Kalinowski, Inc.

Approximate Thickness of Excavation

UPRR Parcel D
Emeryville, CA
March 2008
EKI A60021.00

Figure 3-3

20080317.15180119 G:\A60021.00\Wor08\Figure 3-3.dwg Layout1

CHAPTER 5.
CITYWIDE USE AND DEVELOPMENT REGULATIONS

Sections:

Article 1. General Provisions

9-5.101 Purpose and Applicability

Article 2. Miscellaneous Use Regulations

9-5.201 Purpose
9-5.202 Animal Care and Sales, Kennel/Animal Care
9-5.203 Condominium Conversions
9-5.204 Drive-In and Drive-Through Facilities
9-5.205 Factory-Built Housing (Manufactured Homes)
9-5.206 Lodging, Bed and Breakfast.
9-5.207 Medical Marijuana Dispensaries
9-5.208 Mobile Food Vendors
9-5.209 Mobile Homes on Individual Lots
9-5.210 Recreation, Gaming.
9-5.211 Residential Care Facility, Limited
9-5.212 Residential Care Facilities for the Elderly
9-5.213 Retail
9-5.214 Supportive Housing and Transitional Housing.

Article 3. Adult Oriented Businesses

9-5.301 Purpose
9-5.302 Effect
9-5.303 Home Occupations
9-5.304 Districts Where Allowed
9-5.305 Location Requirements
9-5.306 Conditional Use Permit Required
9-5.307 Conditions of Approval
9-5.308 Public Display of Certain Matter Prohibited
9-5.309 Definitions

Article 4. Affordable Housing Program

9-5.401 Created
9-5.402 General Requirements for New Ownership Residential Projects of Ten (10) or More Dwelling Units
9-5.403 Affordable Unit Requirements for Ownership Residential Projects
9-5.404 Household Eligibility Requirements for Affordable Units
9-5.405 Control of Resale of Ownership Affordable Units
9-5.406 New Rental Residential Projects – Affordable Housing Impact Fees
9-5.407 Rental Affordable Units Permitted if Consistent with Costa-Hawkins Act
9-5.408 Requirements for Rental Affordable Units
9-5.409 New Nonresidential Projects – Affordable Housing Impact Fees
9-5.410 Housing Fund
9-5.411 Availability of Government Subsidies
9-5.412 Density Bonus
9-5.413 Reduction of Amenity and Square Footage
9-5.414 Fees
9-5.415 Technical Assistance
9-5.416 Enforcement
9-5.417 Waiver
9-5.418 Annual Report
9-5.419 Definitions

Article 5. Density Bonus for Affordable Housing

9-5.501 Purpose
9-5.502 Applicability
9-5.503 Projects Eligible for Density Bonus
9-5.504 Application Requirements
9-5.505 Amount of Density Bonus
9-5.506 Concessions and Incentives
9-5.507 Waiver or Reduction of Development Standards
9-5.508 Vehicular Parking Ratio
9-5.509 Requirements for Participation
9-5.510 Definitions

Article 6. Firearms and Ammunition Sales

9-5.601 Purpose
9-5.602 Home Occupations
9-5.603 Districts Where Allowed
9-5.604 Location Requirements
9-5.605 Conditional Use Permit Required
9-5.606 Conditions of Approval
9-5.607 Definitions

Article 7. Hazardous Waste Facilities

9-5.701 Purpose
9-5.702 Applicability
9-5.703 Conditional Use Permit Required
9-5.704 Location
9-5.705 Application Requirements
9-5.706 Noticing Requirements
9-5.707 Local Assessment Committee
9-5.708 Conditions of Approval
9-5.709 Appeals

Article 8. Home Occupations

9-5.801 Purpose
9-5.802 Business License and Zoning Compliance Review Required
9-5.803 Uses Permitted
9-5.804 Uses Excluded
9-5.805 Regulations.

Article 9. Live/Work

9-5.901 Purpose
9-5.902 Applicability
9-5.903 Conditional Use Permit Required
9-5.904 Occupancy of Live/Work Unit
9-5.905 Location and Activity Requirements
9-5.906 Incompatible Use Types
9-5.907 Live/Work Standards
9-5.908 Residential Zones
9-5.909 Existing Live/Work Buildings
9-5.910 Waiver or Reduction of Standards
9-5.911 Review Criteria
9-5.912 Conditions of Approval
9-5.913 Conversion of Live/Work Buildings

Article 10. Nonconforming Uses and Structures

9-5.1001 Purpose
9-5.1002 Applicability
9-5.1003 Exceptions
9-5.1004 Nonconforming Uses as Distinguished from Illegal Uses
9-5.1005 Effect of Conditional Use Permit on Nonconforming Uses
9-5.1006 Determination of Legal Nonconforming Uses
9-5.1007 Incompatible Uses
9-5.1008 Nonconforming Lots
9-5.1009 Continuation and Maintenance of Nonconforming Uses and Structures
9-5.1010 Changes and Substitutions of Nonconforming Uses
9-5.1011 Expansion of Nonconforming Structures and/or Uses
9-5.1012 Restoration of Damaged Nonconforming Structures and/or Uses.
9-5.1013 Reestablishment of Abandoned Nonconforming Uses
9-5.1014 Abatement

Article 11. Performance Standards

9-5.1101 Purpose
9-5.1102 Applicability
9-5.1103 Proof of Compliance
9-5.1104 Measurements
9-5.1105 Air Quality: Noxious Materials
9-5.1106 Air Quality: Noncontaminated Emissions
9-5.1107 Light and Glare
9-5.1108 Liquid or Solid Waste
9-5.1109 Noise
9-5.1110 Odor
9-5.1111 Vibration

Article 12. Preservation of Structures

9-5.1201 Purpose
9-5.1202 Applicability
9-5.1203 Conditional Use Permit Required
9-5.1204 Application
9-5.1205 Approval Procedure for Demolition
9-5.1206 Findings
9-5.1207 Conditions of Approval
9-5.1208 Appeals
9-5.1209 Effect on Building Permits
9-5.1210 Designation of Significant Structures
9-5.1211 Definitions

Article 13. Private Property Access from City Parks, Greenways, and Other City Property

9-5.1301 Purpose
9-5.1302 Applicability
9-5.1303 Conditional Use Permit Required
9-5.1304 Allowable Uses
9-5.1305 Alternate Access
9-5.1306 Limitations
9-5.1307 Landscaping and Maintenance of Property Gaining Access
9-5.1308 Access Facilities
9-5.1309 Financial Contribution to Citywide Parks Fund
9-5.1310 Application
9-5.1311 Findings
9-5.1312 Conditions of Approval

Article 14. Secondary Residential Units

9-5.1401 Purpose
9-5.1402 Applicability
9-5.1403 Approval Procedure
9-5.1404 Where Allowed
9-5.1405 Building Intensity and Residential Density
9-5.1406 Size of Unit
9-5.1407 Parking
9-5.1408 Dimensional Requirements
9-5.1409 Design
9-5.1410 Other Requirements

Article 15. Sidewalk Cafes

9-5.1501 Purpose
9-5.1502 Permit Required
9-5.1503 Where Permitted
9-5.1504 Standards
9-5.1505 Alcoholic Beverages
9-5.1506 Application
9-5.1507 Approval Procedure
9-5.1508 Required Findings
9-5.1509 Renewal
9-5.1510 Revocation
9-5.1511 Appeals
9-5.1512 Restoration of Sidewalk
9-5.1513 Amortization
9-5.1514 Parklets
9-5.1515 Definitions

Article 16. Signs

9-5.1601 Purpose
9-5.1602 Applicability
9-5.1603 Procedure
9-5.1604 Prohibited Signs
9-5.1605 Exempt Signs
9-5.1606 General Provisions for All Sign Types
9-5.1607 Standards for Specific Sign Types
9-5.1608 Sign Regulations in the RM Medium Density Residential Zone
9-5.1609 Sign Regulations in All Other Zones
9-5.1610 Temporary Commercial Signs
9-5.1611 Design Principles
9-5.1612 Procedures for Individual Establishment Signs
9-5.1613 Master Sign Programs
9-5.1614 Nonconforming Signs
9-5.1615 Definitions

Article 17. Telecommunications Facilities

9-5.1701 Purpose
9-5.1702 Applicability and Exemptions
9-5.1703 Application Requirements
9-5.1704 Review of Telecommunications Facilities
9-5.1705 Development Requirements and Standards
9-5.1706 Post-Installation Verification and Monitoring
9-5.1707 Discontinuance of Use
9-5.1708 Definitions

Article 18. Emergency Shelters

9-5.1801 Purpose
9-5.1802 Applicability
9-5.1803 Approval Procedure
9-5.1804 Standards

Article 19. Development Impact Fees

9-5.1901 Authority and Reference to This Article
9-5.1902 Purpose of Fees
9-5.1903 Use of Fees
9-5.1904 Calculation of Fees by Implementing Resolutions
9-5.1905 Obligation to Pay Fees
9-5.1906 Timing of Payment
9-5.1907 Amount of Payment
9-5.1908 Fee Adjustments by the City
9-5.1909 Exemptions
9-5.1910 Request for Refund
9-5.1911 Application for Potential Credit
9-5.1912 Timing of Application for Potential Credit
9-5.1913 Amount of Potential Credit
9-5.1914 Request for Reimbursement
9-5.1915 Allocation of Reimbursements
9-5.1916 Notice of Protest Rights
9-5.1917 Informal Hearing
9-5.1918 Director's Determination
9-5.1919 Appeal of Director's Determination
9-5.1920 Appeal Hearing
9-5.1921 Decision of Independent Hearing Officer; Judicial Review
9-5.1922 Costs of Protest
9-5.1923 Applicant's Acknowledgment of Adjustment or Waiver
9-5.1924 Definitions

Article 1. General Provisions

9-5.101 Purpose and Applicability.
The purpose of this chapter is to set forth development regulations that apply throughout the City.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 2. Miscellaneous Use Regulations

9-5.201 Purpose.
The purpose of this article is to consolidate in one (1) location miscellaneous Citywide use and development regulations that pertain to the various use classifications in Chapter 2 and to other uses and situations, and that are so brief as not to warrant separate articles.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.202 Animal Care and Sales, Kennel/Animal Care.
Screening for any outdoor activities shall be provided in conformance with the requirements of Article 5 of Chapter 4.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.203 Condominium Conversions.
See Article 7 of Chapter 6 for regulations pertaining to the conversion of rental housing to condominiums.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.204 Drive-In and Drive-Through Facilities.
Drive-In and Drive-Through Facilities are prohibited. This prohibition does not apply to drive-in movies, which may be approved as temporary uses only, pursuant to the temporary use permit procedure in Article 6 of Chapter 7.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.205 Factory-Built Housing (Manufactured Homes).
Factory-built housing shall be treated the same as conventional site-built housing.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.206 Lodging, Bed and Breakfast.

(a) Separate Entry Required. The residential unit containing the Bed and Breakfast establishment must have a separate private entry that is not shared with any other dwelling unit; shared entry, such as through a common lobby, hallway, pathway, or elevator, is not allowed.

(b) Owner Occupancy Required. The owner must reside in the residential unit containing the Bed and Breakfast establishment.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.207 Medical Marijuana Dispensaries.

Medical marijuana dispensaries are prohibited pursuant to Section 5-28.04.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.208 Mobile Food Vendors.

(a) On the Public Right-of-Way. Mobile Food Vendors to be located on the public right-of-way are not subject to these planning regulations, but are regulated pursuant Chapter 27 of Title 5 and Chapter 3 of Title 6.

(b) On Private Property. Mobile Food Vendors to be located on private property or elsewhere not on the public right-of-way are subject to these planning regulations, a are eligible only for temporary use permits pursuant to Article 6 of Chapter 7.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.209 Mobile Homes on Individual Lots.

Mobile homes on individual lots shall be treated the same as Single Unit residential uses.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.210 Recreation, Gaming.

Pursuant to Section 5-5.14, card rooms are only allowed on San Pablo Avenue south of Park Avenue.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.211 Residential Care Facility, Limited.

Limited Residential Care Facilities, including group homes and Residential Care Facilities for the Elderly, which provide care for six (6) or fewer persons shall be treated same as Single Unit residential uses.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.212 Residential Care Facilities for the Elderly.

(a) Defined. A Residential Care Facility for the Elderly is a Residential Care Facility, as defined in Section 9-2.215, that serves persons sixty (60) years of age and olde

(b) Building Intensity Bonus. A Residential Care Facility for the Elderly shall receive a bonus of one percent (1%) of building intensity (floor area ratio or FAR) for each percent (1%) of beds provided to persons eligible for Supplemental Security Income (SSI) as defined by the U.S. Social Security Administration, up to a maximum of twer five percent (25%). This bonus is in addition to any bonuses available pursuant to Section 9-4.204.

(c) Guarantee Required. To be eligible for the bonus provided in subsection (b) of this section, the owner of the Residential Care Facility for the Elderly shall enter into agreement with the City, in a form acceptable to the City Attorney, to guarantee the availability of such beds for persons eligible for SSI for a minimum of fifty-five (55) ye

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.213 Retail.

(a) Outdoor Sales. Screening for any outdoor sales shall be provided in conformance with the requirements of Article 5 of Chapter 4.

(b) Tobacco Shops. Pursuant to Section 5-29.10, Tobacco Shops are prohibited from being located within one thousand feet (1,000') of public or private schools and p greenways and playgrounds.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.214 Supportive Housing and Transitional Housing.

A Supportive Housing or Transitional Housing development shall be considered a residential use of property subject only to those same restrictions that apply to other residential uses of the same type (e.g., One (1) Unit, Two (2) Unit, or Multi-Unit) in the same zoning district.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 3. Adult Oriented Businesses

9-5.301 Purpose.

This article establishes the adult entertainment regulations. The purpose of these regulations is to implement policies contained in the General Plan, particularly those re to the conservation of existing neighborhoods and the compatibility of uses. In adopting this article, it is recognized that certain types of adult entertainment businesses possess certain objectionable operational characteristics which, if such

uses are allowed to concentrate, will have adverse effects upon the character of the areas in which they concentrate and adjacent neighborhoods. Special regulation of entertainment uses is therefore necessary to ensure that these adverse effects of adult entertainment uses will not contribute to the blighting or downgrading of zoning districts in which they are permitted or of surrounding neighborhoods.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.302 Effect.

This article shall not be interpreted as legalizing or condoning the production, presentation, sale, advertisement, dissemination, or distribution of matter which is obscene defined and regulated by applicable State and local laws; nor shall this article be interpreted as legalizing or condoning participation in management, production, presentation, or exhibition of obscene live conduct in any public place or any place exposed to the public view as defined and regulated by applicable State and local law shall this article be interpreted as legalizing or condoning any other activity which is otherwise prohibited by State or local law.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.303 Home Occupations.
It is unlawful to establish any adult entertainment business as defined in this article as a Home Occupation as defined in Article 8 of this chapter.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.304 Districts Where Allowed.
It is unlawful to establish any adult entertainment business as defined in this article in any district other than the INH Heavy Industrial zone.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.305 Location Requirements.
Within the INH Heavy Industrial zone, no adult entertainment business shall be established in the following locations:

(a) Within two hundred feet (200') of any area zoned for residential use;

(b) Within five hundred feet (500') of any other adult entertainment business;

(c) Within one thousand feet (1,000') of any public park, religious institution or elementary or secondary school.

The distance between any two (2) adult entertainment businesses shall be measured in a straight line, without regard to intervening structures, from the closest exterior structural wall of each business. The distance between any adult entertainment business and any residential district, religious institution, school, or public park shall be measured in a straight line, without regard to intervening structures, from the closest property line of the residential zone, religious institution, school, or public park to th closest exterior structural wall of such adult entertainment business.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.306 Conditional Use Permit Required.
It is unlawful to establish an adult entertainment business without first obtaining a conditional use permit as provided in this article. No other use permit shall be required operate an adult entertainment business. No final action may be taken by the Planning Commission until the Emeryville Police Department has issued an operating perm the use or a statement that such permit is not required. To grant a conditional use permit for an adult entertainment business, the following findings must be made in add to the findings required by Article 5 of Chapter 7:

(a) That the proposed adult entertainment business meets all of the location requirements of Section 9-5.305.

(b) That the proposed adult entertainment business will not be open between 2:00 a.m. and 6:00 a.m. daily.

(c) That the proposed adult entertainment business will not use electronic amplification between midnight and 6:00 a.m. daily.

(d) That the proposed adult entertainment business will be adequately soundproofed or insulated for noise and operated so that incidental noise shall not be audible beyond the premises.

(e) That the proposed adult entertainment business will comply with all applicable performance standards in Article 11 of this chapter.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.307 Conditions of Approval.
In approving a conditional use permit for an adult entertainment business, the Planning Commission may designate such conditions as it deems necessary in order to ful the purposes of this article, and may require reasonable guarantees and evidence that such conditions are being, or will be, complied with. Such conditions shall not be restrictive than the conditions attached to any operating permit issued by the Emeryville Police Department, and may include, but are not limited to, designating hours of operation more restrictive than those listed in Section 9-5.306(b).

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.308 Public Display of Certain Matter Prohibited.
All building openings, entries, and windows of adult entertainment businesses shall be located, covered, or screened in such a manner as to prevent a view into the inter from any public or semipublic area, including public sidewalks, streets, arcades, hallways, or passageways of any material which has as its primary or dominant theme m depicting, illustrating, describing, or relating to “specified sexual activities” or “specified anatomical areas” as defined in this article. Furthermore, such businesses may n have signs, graphics, or window displays which in any way present, depict, illustrate, or describe such material when such material has as its purpose or effect sexual arousal, gratification, or affront.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.309 Definitions.
(a) For the purpose of this article “adult entertainment businesses” includes all Adult Oriented Businesses as defined in Section 9-2.303, and more specifically refers to following establishments:

(1) “Adult arcade” shall mean an establishment where, for any form of consideration, one (1) or more motion picture projectors, slide projectors, or similar machine for viewing by five (5) or fewer persons each, are used to show films, motion pictures, video cassettes, slides, or other photographic reproductions which are characterized by an emphasis upon the depiction or description of “specified sexual activities” or “specified anatomical areas.”

(2) “Adult bookstore” shall mean an establishment in which at least thirty percent (30%) of the business involves the sale, for any form of consideration, of any one or more of the following:

a. Books, magazines, periodicals or other printed matter, or photographs, films, motion pictures, video cassettes, slides, or other visual representations which characterized by an emphasis upon the depiction or description of “specified sexual activities” or “specified anatomical areas,” or

b. Instruments, devices, or paraphernalia which are designed for use in connection with “specified sexual activities.” This definition does not include a bona fi pharmacy.

c. For purposes of this definition, “at least thirty percent (30%) of the business” means at least thirty percent (30%) of the stock-in-trade, or at least thirty perc

(30%) of the floor area of that portion of its total premises devoted to the display of its stock-in-trade, or the derivation of at least thirty percent (30%) of the gro income of the establishment.

(3) "Adult motion picture theater" shall mean an establishment where, for any form of consideration, films, motion pictures, video cassettes, slides, or similar photographic reproductions are shown to an audience of six (6) or more persons, and in which a substantial portion of the total presentation time is devoted to the showing of material which is characterized by an emphasis upon the depiction or description of "specified sexual activities" or "specified anatomical areas."

(4) "Adult theater" shall mean a theater, concert hall, auditorium, or similar establishment which, for any form of consideration, regularly features live performance which are characterized by the exposure of "specified anatomical areas" or by "specified sexual activities."

(5) "Bathhouse" shall mean an establishment which provides the services of baths of all kinds, including all forms and methods of hydrotherapy, during which "specified anatomical areas" are displayed or "specified sexual activities" occur. This section shall not apply to hydrotherapy practiced by, or under the supervision medical practitioner, chiropractor, acupuncturist, or physical therapist, or a similar establishment where baths or hydrotherapy are offered as incidental or accessory services.

(b) For the purposes of this article, "specified sexual activities" shall include the following:

(1) Human genitals in a state of sexual stimulation or arousal;

(2) Acts of human masturbation, sexual intercourse, or sodomy; or

(3) Fondling or other erotic touching of human genitals, pubic region, buttock, or female breast.

(c) For the purposes of this article, "specified anatomical areas" shall include less than completely and opaquely covered: human genitals or pubic region; buttock; or female breast below a point immediately above the top of the areola.

(d) For the purposes of this article, certain terms and words are defined as follows:

(1) "Establishment" shall mean the "establishment" of an adult entertainment business and shall mean and include any of the following:

a. The opening or commencement of any such business as a new business;

b. The conversion of an existing business, whether or not an adult entertainment business, or any of the adult entertainment businesses defined herein;

c. The addition of any of the adult entertainment businesses defined herein to any other existing adult entertainment business; or

d. The relocation of any such business.

(2) "Person" shall mean any person, firm, partnership, association, corporation, company, or organization of any kind.

(3) "Public park" shall mean a park, playground, swimming pool, beach, pier, or athletic field within the City which is under the control, operation, or management City.

(4) "Religious institution" shall mean a building which is used primarily for religious worship and related religious activities.

(5) "School" shall mean an institution of learning for minors, whether public or private, which offers instruction in those courses of study required by the California Education Code or which is maintained pursuant to standards set by the State Board of Education. This definition includes a nursery school, kindergarten, elementa school, junior high school, senior high school, or a special institution of learning under the jurisdiction of the State Department of Education, but it does not include vocational or professional institution or any institution of higher education, such as a community or junior college, college or university.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 4. Affordable Housing Program

9-5.401 Created.

To lessen the shortage of housing affordable to moderate, median, low, and very low income households in the City of Emeryville as partial compliance with California Government Code Section 65583(c), there is hereby created an affordable housing program.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.402 General Requirements for New Ownership Residential Projects of Ten (10) or More Dwelling Units.

(a) Developers of new ownership residential projects (both new construction and conversion of nonresidential space to a residential use) of ten (10) or more dwelling un lots, including but not limited to, single-family dwellings, or condominium developments, either partially or completely in Emeryville, shall be conditioned to provide a designated percentage of the dwelling units in the project as units affordable to moderate income households for a minimum period of forty-five (45) years from date of availability as more fully described below, unless the developer, in agreement with the City Council, elects to commit to a fixed percentage of the affordable units as bein affordable to median income households in return for a reduction of the affordability percentage.

(b) Any development permit for new ownership residential projects (both new construction and conversion) of ten (10) or more dwelling units or parcels that provide affordable units pursuant to subsection (a) of this section shall have conditions attached which will assure compliance with the provisions of this article. The conditions sh require a written agreement to indicate the number, type, location, approximate size, and construction scheduling of all dwelling units, the appropriate price levels, provis for income certification and screening of potential occupants of affordable units, a resale control mechanism, a density bonus, if applicable, and such reasonable informa as shall be required by the City for the purpose of determining the applicant's compliance with this article.

(c) All affordable units in a project and phases of a project should be constructed concurrently with or prior to the construction of non-affordable units, unless the City determines that extenuating circumstances exist.

(d) All affordable units shall be occupied by moderate or median income households as certified by the City or its operating agent.

(e) Unless the City finds compelling reasons to the contrary, the affordable units shall be dispersed throughout the development, the mix and type of affordable units sha proportionate to those of the project as a whole, and the affordable units shall be comparable with the design of the base level market rate units prior to purchaser-funde upgrades in terms of appearance, materials, and quality of finishes. Parking designated for the affordable units shall be provided in an equitable manner as that provide the market rate units. The written agreement referred to in subsection (b) of this section shall include a breakdown of the types of units provided as affordable, which sha

directly proportionate to the types of units in the project as a whole under the provisions of this subsection (e) of this section.

(f) The applicant shall have the option, with the approval of the City, to transfer credit for affordable units constructed at one (1) location within the City to satisfy the requirements of this article. The affordability requirement may be satisfied with construction of dwelling units up to twelve (12) months prior to the approval of the project.

(g) Upon a finding by the City that the construction of the required affordable units is not feasible or appropriate as part of a larger development project, the applicant sh have the option to construct the affordable units on a site or sites not contiguous with the development, but within the Emeryville City limits.

(h) The applicant shall have the option, with the concurrence of the City, in a home ownership project, of constructing rental affordable units in a number sufficient to me the requirements of this article if the provision of the affordable units is consistent with Section 9-5.407.

(i) Where the applicant elects to initially rent all of the units in an ownership residential project, the applicant shall have the option of providing rental affordable units if th provision of the units is consistent with Section 9-5.407.

(j) Where units at a separate location are used to meet the affordability requirements under subsections (f), (g), and (h) of this section, the affordability percentage shall applied to the number of units at the two (2) or more locations combined.

(k) Where the applicant is willing to commit to making a portion of the affordable units affordable to median income households for forty-five (45) years:

(1) The applicant can seek approval by the City under subsection (a) of this section to reduce the number of units required; and

(2) The City may subsidize the cost of traffic impact fees, if any, building permit fees, and other fees and exactions that may be required of some or all of the project units.

(l) Prior to City approval of a lesser percentage of affordable units in return for targeting to median income under subsections (a) and (k) of this section, the City must fin that the request provides at least an equivalent contribution toward City goals.

(m) Notwithstanding the other provisions of this section, the owner of any rental residential project or the owner of any ownership residential project that is initially rented whether constructed prior to or after the original adoption of Article 7 of Chapter 6 of this title, and that contains ten (10) or more dwelling units on lots, shall be required notify the City at least one hundred twenty (120) days prior to a proposed change to the tenure of the residential project from rental units to for-sale, ownership units, as as at least one hundred twenty (120) days prior to any proposed transfer or assignment of project, such that the requirements of this chapter that are effective as of the of said notification to the City will be imposed on the ownership residential project through execution of a written agreement as referred to in Section 9-5.402(b) and any other agreements as required by the City (such as an assignment and assumption agreement).

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.403 Affordable Unit Requirements for Ownership Residential Projects.

(a) In new ownership residential projects, twenty percent (20%) of the dwelling units shall be affordable to moderate income households as provided above. The housing sales prices corresponding to these income ranges shall be established by the City or its designee. In ownership residential projects located partially in Emeryville, twent percent (20%) of the units in Emeryville shall be affordable units or ten percent (10%) of all of the units in the project shall be affordable units with all of the affordable un located in Emeryville, whichever is greater. In applying these percentages, any decimal fraction less than or equal to one-half (0.50) may be disregarded and any decima fraction greater than one-half (0.50) shall be construed as requiring one dwelling unit.

(b) The developer shall offer to sell the affordable units required by this article to eligible purchasers for a period of not less than one hundred twenty (120) days from th date of the City's issuance of the certificate of occupancy for each particular affordable unit, with the sale being completed within ninety (90) days thereafter. At the end the one hundred twenty (120) day marketing period, the City, in its sole discretion, may require the developer to extend its sales efforts for an additional sixty (60) day pe The developer shall actively market the units during this period and implement any suggestions provided by the City. Furthermore, if negotiating the agreement with the developer, the City may require that the marketing periods be extended depending on the number of units to be constructed and marketed at that same time.

(c) If the developer is unable to sell some or all of the affordable units at the end of the marketing period described in subsection (b) of this section, the City shall be offe the opportunity to sell the units for a period of no less than sixty (60) days, with sales being completed within ninety (90) days thereafter. During this period, the City or it designee may purchase the units.

(d) If the developer, City, or the City's operating agent are unable to sell some or all of the affordable units at the end of the marketing periods described in subsections and (c) of this section, and the City or its designee does not purchase the units, then the developer may sell the affordable units at an unrestricted price to a bona fide purchaser for value and pay the City an amount equal to the difference between the sales price and the affordable cost established by the City. After payment of the req amount to the City, all sale and resale restrictions shall be removed from the affordable unit.

(e) The developer shall advertise the initial availability of all affordable units in a project to the Emeryville general public through a marketing program approved by the Ci The developer shall seek qualified purchasers through a process involving community outreach and broad marketing efforts, informational workshops, an application, a lottery, and application review and processing. The City or its operating agent shall review the assets and income of prospective purchasers of the ownership affordable on a project-by-project basis and shall make the final decision about income eligibility. Unless otherwise prohibited by law, preference will be given first to residents of Emeryville and second to people employed in Emeryville, or to other preferences as adopted by the City for a particular ownership residential project subject to this articl part of its review of the eligibility of prospective purchasers, the City or its operating agent shall advise all prospective purchasers of the resale restrictions applicable to ownership affordable units as specified in this article and shall require all purchasers to participate in City-approved homebuyer education prior to the close on escrow o purchaser's affordable unit.

(f) The City shall enter into recorded agreements with developers, and take other appropriate steps necessary to assure that the required moderate and median income ownership units are provided and that the units remain affordable to moderate or median income households for a period of at least forty-five (45) years from the record of the purchase agreement.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.404 Household Eligibility Requirements for Affordable Units.

(a) In establishing moderate, median, low or very low household income, the City or its designee shall consider, among other things, the median household income data provided periodically by the California Department of Housing and Community Development, household size and number of dependents, and all sources of household income and assets.

(b) Every purchaser of an affordable unit shall certify by a form acceptable to the City that the dwelling unit is being purchased for the purchaser's primary place of resid

The City or its operating agent shall verify this certification. Failure, by the purchaser, to maintain eligibility for homeowners' property tax exemption shall be construed to mean that the affordable unit is not the primary place of residence of the purchaser. Should the purchaser fail to make the unit his/her principal place of residence within (6) months following notice by the City of the failure to comply with this provision, such failure shall authorize the City to send a subsequent notice that it treats the failure sale which triggers a preemptive option for the City to purchase such unit consistent with the procedures set out in Section 9-5.405(b); provided, that no sale is deemed occur, no option periods are triggered, and no rights of the City are extinguished if it does not send the second written notice deeming the failure of the owner to comply sale.

(c) The policies governing the selection of home buyers for certification by the City or its operating agent under the provisions of this article shall be established by the C These shall include, but not be limited to, maximum income and asset limits, order of preference, and policy on first-time home buyers. The most recently established crite shall be used by the City or its operating agent in selecting home buyers and in structuring any lottery.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.405 Control of Resale of Ownership Affordable Units.

(a) In order to maintain the availability of the affordable units as may be constructed pursuant to the requirements of this article, the City shall impose the following resale conditions for a minimum period of forty-five (45) years from the recordation of each grant deed, which forty-five (45) year period shall start over with each resale. The pr received by the seller of an affordable unit shall be limited to the lesser of a bona fide offer to purchase or the price affordable to a moderate income household. If the affordable unit has been established for a median income household through an agreement with the developer as provided in Section 9-5.402(k), then the price of the u shall be the lesser of the bona fide offer to purchase or the price affordable to a median income household, as applicable.

(b) Home ownership affordable units shall be sold and resold from the date of the original sale only to moderate and median income households as determined to be elig for affordable units by the City or its operating agent according to the requirements of this article. When an owner of an affordable unit desires to sell the unit, the owner notify the City. The owner shall market the unit to eligible purchasers for a period of not less than ninety (90) days from the date of notification to the City of the desire to and of initiation of marketing (unit is available for viewing and designated contact person available to respond to inquiries), with the sale being completed within ninety (9 days thereafter. If the owner is unable to sell the unit to an eligible purchaser, then the City shall be offered the opportunity to sell the unit for a period of no less than six (60) days, with sale being completed within ninety (90) days thereafter. During this period, the City or its designee may purchase the units. The seller shall not levy or ch any additional fees nor shall any finder's fee or other monetary consideration be allowed other than customary real estate commissions and closing costs.

(c) If the owner, City, or the City's operating agent are unable to sell the unit at the end of the marketing periods described in subsection (b) of this section, and the City designee does not purchase the units, then the owner may sell the affordable unit at an unrestricted price to a bona fide purchaser for value and pay the City an amount equal to the difference between the sales price and the affordable cost established by the City. After payment of the required amount to the City, all sale and resale restrictions shall be removed from the affordable unit.

(d) The owners of any affordable unit shall attach and legally reference in the grant deed conveying title of any such affordable ownership unit a declaration of restriction provided by the City or its operating agent stating the restrictions imposed pursuant to this article. The grant deed shall afford the grantor and the City the right to enforc attached declaration of restrictions. The declaration of restrictions shall include all applicable resale controls, occupancy restrictions, and prohibitions as required by this article. Should the City provide subsidies or financing for any affordable unit, including down payment assistance loans, it will require the filing of a deferred payment subordinate deed of trust in favor of the City, having such terms as the City shall from time to time require, and that subordinate deed of trust shall incorporate and make further enforceable the declaration of restrictions referred to in this subsection.

(e) The City or its operating agent shall be given the responsibility of monitoring the resale of ownership affordable units. Any violation of the resale provisions shall be referred to the City for appropriate action.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.406 New Rental Residential Projects – Affordable Housing Impact Fees.

(a) Rental residential projects shall pay affordable housing impact fees as prescribed by this section to mitigate the project's impact on the need for affordable housing in City, unless the applicant elects to provide on-site rental affordable units consistent with Section 9-5.407.

(b) Affordable housing impact fees for rental residential projects shall be established by resolution of the City Council and may be amended from time to time as required Such fees shall not exceed the cost of mitigating the impact of market rate residential projects on the need for affordable housing in the City.

(c) The affordable housing impact fee shall be paid upon issuance of a building permit for each dwelling unit in the rental residential project. The amount of any affordabl housing impact fee payable under this section shall be based upon the fee schedule in effect at the time of issuance of the building permit for the dwelling unit to which tl fee relates.

(Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.407 Rental Affordable Units Permitted if Consistent with Costa-Hawkins Act.

(a) As an alternative to paying the affordable housing impact fees as required by Section 9-5.406, or where an applicant elects to initially rent all of the units in an owner residential project, an applicant may propose to provide six and nine-tenths percent (6.9%) of the dwelling units in the residential project as rental units affordable to low income households. In calculating the number of required rental affordable units, any decimal fraction less than or equal to one-half (0.50) may be disregarded and any decimal fraction greater than one-half (0.50) shall be construed as requiring one dwelling unit.

(b) To ensure compliance with the Costa-Hawkins Act (Chapter 2.7 of Title 5 of Part 4 of Division 3 of the Civil Code), the City may only approve a proposal to provide re affordable units if the applicant agrees in a recorded agreement with the City to limit rents in consideration for a direct financial contribution or a form of assistance speci in Chapter 4.3 (commencing with Section 65915) of Division 1 of Title 7 of the Government Code.

(c) Any development permit for a new residential project (both new construction and conversion) that provides rental affordable units pursuant to subsection (a) of this section shall have conditions attached which will assure compliance with the provisions of this article. The conditions shall require an agreement to be recorded prior to occupancy that indicates the number, type, location, approximate size, and construction scheduling of all dwelling units, the appropriate rent levels, provision for income certification and screening of potential occupants of affordable units, a density bonus, if applicable, compliance with the Costa-Hawkins Act, and such reasonable informa as shall be required by the City for the purpose of determining the applicant's compliance with this article. The agreement shall require that the rental affordable units be rented to low income households for a period of at least fifty-five (55) years from the date of recordation of the agreement, unless all of the units in the residential project offered to the public for purchase. In that event, the applicant shall provide twenty percent (20%) of the dwelling units as ownership affordable units complying with Secti 9-5.402 through 9-5.405. The recorded agreement shall provide relocation benefits for tenants of the rental affordable units in the event of sale.

(Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.408 Requirements for Rental Affordable Units.
(a) All rental affordable units in a project and phases of a project should be constructed concurrently with or prior to the construction of nonaffordable units, unless the C determines that extenuating circumstances exist.

(b) All rental affordable units shall be occupied by low or very low income households.

(c) Unless the City finds compelling reasons to the contrary, the rental affordable units shall be dispersed throughout the development, the mix and type of rental afforda units shall be proportionate to those of the project as a whole, and shall be comparable with the design of the base level market rate units prior to purchaser-funded upgrades in terms of appearance, materials, and quality of finishes. Parking designated for the rental affordable units shall be provided in an equitable manner as that provided for the market rate units. The written agreement referred to in Section 9-5.407(c) shall include a breakdown of the rental affordable units, which shall be directly proportionate to the types of units in the project as a whole under the provisions of this subsection (c).

(d) The developer shall market the rental affordable units as required by this article to eligible renters throughout the duration of the written agreement referred to in Sec 9-5.407(c). No less than one hundred twenty (120) days prior to the initial lease up of the affordable units, the developer shall provide the City, for its review and approv marketing program for the affordable units, which program shall be in conformance with the City's affordable unit marketing program procedures promulgated by the City may be amended from time to time. During the initial lease up of the affordable units, the developer shall market the affordable units commencing upon approval of the marketing program by the City for a period of time no less than one hundred twenty (120) days after the date of the City's issuance of the certificate of occupancy for the project. At the end of the one hundred twenty (120) day marketing period, the City, in its sole discretion, may require the developer to extend its marketing efforts for an additional sixty (60) day period increment. The developer shall actively market the units during this period and implement any suggestions provided by the City. Furtherm in negotiating the written agreement with the developer, the City may require that the marketing periods be extended depending on the number of units to be constructe and marketed at that same time. On an annual basis, in coordination with its obligations to income certify occupants of affordable units, the developer shall review and re as necessary and as approved by the City, its marketing program in order to maintain conformance with the City's procedures or otherwise respond to market conditions

(e) The developer shall advertise the initial availability of affordable units to the Emeryville general public through a marketing program approved by the City. Upon notification of the availability of rental dwelling units by the developer, the developer shall seek qualified renters through a process involving community outreach and bro marketing efforts, informational workshops, an application submittal, a lottery, and application review and processing.

(f) Unless otherwise prohibited by law, preference will be given first to residents of Emeryville and second to people employed in Emeryville, or to other preferences as adopted by the City for a particular rental residential project subject to this article.

(g) The City or its operating agent shall monitor the affordable rental units. The developer or owner shall retain final discretion in the selection of the eligible households; provided, that the same rental terms and conditions (except rent levels and income) are applied to tenants of affordable units as are applied to all other tenants, except a required to comply with government subsidy programs.

(Formerly 9-5.406. Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.409 New Nonresidential Projects – Affordable Housing Impact Fees.
(a) Nonresidential projects shall pay affordable housing impact fees to mitigate the project's impact on the need for affordable housing in the City.

(b) Affordable housing impact fees for nonresidential projects shall be established by resolution of the City Council and may be amended from time to time as required. S fees shall not exceed the cost of mitigating the impact of nonresidential projects on the need for affordable housing in the City. The City Council may from time to time ad housing impact fees for different categories of nonresidential projects, specify the specific uses within each nonresidential land use category, and establish a list of nonresidential uses exempt from the payment of affordable housing impact fees.

(c) The affordable housing impact fee shall be paid upon issuance of a building permit for any nonresidential project for which the fee is due. The amount of any affordab housing impact fee payable under this section shall be based upon the fee schedule in effect at the time of issuance of the building permit for the nonresidential project t which the fee relates.

(d) As an alternative to payment of the affordable housing impact fee set forth in this section, an applicant for a nonresidential project may submit a request to mitigate th affordable housing impacts of such development through the construction of affordable units, either on site or off site, through the dedication of land, or through other m The City Council may approve or conditionally approve such an alternative if the City Council determines, based on substantial evidence, that such alternative complianc provide as much or more affordable housing at the same or lower income levels as will payment of the affordable housing impact fee, is consistent with the General Plan Housing Element, and will otherwise provide as great a public benefit as would payment of the affordable housing impact fee. Any affordable units constructed on site or site shall comply with the provisions contained in Sections 9-5.402 through 9-5.408, as applicable.

(Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.410 Housing Fund.
(a) There is established in the City an affordable housing fund for the purpose of receiving and disbursing certain monies to address the housing needs of extremely low very low, low, median and moderate income households. Separate accounts within such housing fund may be created from time to time to avoid commingling if required law or as deemed appropriate to further the purposes of the housing fund.

(b) All affordable housing impact fees shall be deposited into the affordable housing fund.

(c) The fees collected under this article and all earnings from investment of the fees shall be expended exclusively to provide or assure continued provision of affordable housing in the City to meet the housing needs of the City's workforce through acquisition, construction, development assistance, substantial rehabilitation, financing, rent other subsidies, or other methods, and for costs of administering programs which serve those ends. The housing shall be of a type, or made affordable at a cost or rent, which there is a need in the City and which is not adequately supplied in the City by private housing development in the absence of public assistance and to the extent feasible shall be utilized to provide for moderate, median, low, very low, and extremely low income housing.

(Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.411 Availability of Government Subsidies.
It is the intent of this article that the requirements for units affordable by moderate, median, low, and/or very low income families shall not be determined by the availabilit government subsidies. This is not to preclude the use of such programs or subsidies.

This article is also not intended to be an undue burden on the developers of residential projects. Therefore, as detailed in succeeding sections of this article, incentives a given to provide affordable units.

(Formerly 9-5.407. Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.412 Density Bonus.
To avoid any undue economic burden or cost to the applicant providing affordable units required by the provisions of this article, developers of affordable housing may a for a density bonus and other incentives, if eligible, pursuant to Article 5 of this chapter. Any such density bonus shall be in addition to any development bonuses grante pursuant to Section 9-4.204.

(Formerly 9-5.408. Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.413 Reduction of Amenity and Square Footage.
Upon a showing of economic hardship and necessity by the applicant:

(a) With City approval, the applicant may reduce the interior amenity level of the affordable units below that of the market-rate units, provided such dwelling units conforr the requirements of applicable building and housing codes; and

(b) With City approval, the applicant may reduce the square footage of the affordable units below that of the market-rate units, provided all dwelling units conform to the requirements of applicable building and housing codes.

(Formerly 9-5.409. Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.414 Fees.
In the attempt to avoid any undue burden on developers who are required to provide affordable units under the provisions of this article, the City may subsidize the cost traffic impact fees, if any, building fees and other City fees applicable to the affordable units of a proposed housing development.

(Formerly 9-5.410. Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.415 Technical Assistance.
In order to emphasize the importance of securing moderate, median, low and very low income housing as a part of this program, the City and/or designated consultants provide assistance on financial subsidy programs to applicants. During individual project review, consideration shall be given to an economic analysis which will indicate most suitable methods for the terms of this article to be implemented. This is to be done for the purpose of increasing the feasibility and lowering the cost of dwelling unit affordable to moderate, median, low and very low income households.

(Formerly 9-5.411. Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.416 Enforcement.
(a) The provisions of this article shall apply to all agents, successors, and assignees of an applicant for development of the site. No building permit or occupancy permit s be issued, nor any development approval granted, which does not meet the requirements of this article.

(b) In addition to, or in lieu of, the provisions of subsection (a) of this section, the City shall institute injunction, mandamus, or any other appropriate legal actions or proceedings for the enforcement of this article.

(c) Any person, firm, or corporation, whether as principal, agent, employee or otherwise, violating or causing the violation of any of the provisions of this article, shall be of a misdemeanor, and upon conviction thereof shall be punishable for each offense by a fine of not more than five hundred dollars ($500.00), or by imprisonment in the County Jail for a term not exceeding six (6) months, or by both fine and imprisonment. Such person, firm, or corporation shall be deemed to be guilty of a separate offen for each and every day during any portion of which any violation of this article is commenced, continued, or permitted by such person, firm, or corporation, and shall be punishable as provided herein.

(Formerly 9-5.412. Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.417 Waiver.
(a) As part of an application for the first approval of a residential project or nonresidential project, an applicant may apply for a reduction, adjustment, or waiver of the requirements of this article based upon a showing that applying the requirements of this article would result in an unconstitutional taking of property or would result in an other unconstitutional result. The applicant shall set forth in detail the factual and legal basis for the claim, including all supporting technical documentation, and shall bea burden of presenting the requisite evidence to demonstrate the alleged unconstitutional result. The City may assume each of the following when applicable:

(1) The applicant will benefit from the incentives set forth in the City Code; and

(2) The applicant will provide the most economical affordable units feasible in terms of financing, construction, design, location and tenure.

(b) The City Council, based upon legal advice provided by or at the behest of the City Attorney, may approve a reduction, adjustment, or waiver if the approval authority determines that applying the requirements of this article would effectuate an unconstitutional taking of property or otherwise have an unconstitutional application to the property. The reduction, adjustment, or waiver shall be approved only to the extent necessary to avoid an unconstitutional result, after adoption of written findings, and b on legal analysis and the evidence. If a reduction, adjustment, or waiver is granted, any change in the residential or nonresidential project shall invalidate the reduction, adjustment, or waiver, and a new application shall be required for a reduction, adjustment, or waiver pursuant to this section.

(Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.418 Annual Report.
The City shall prepare, or cause to be prepared, an annual report to the City Council on the status of the affordable units constructed under the provisions of this article. report shall include the number, size, type, tenure, and general location of the affordable units as well as the number of resales and rental vacancy rate. This report shal provide a basis for an evaluation of the overall effectiveness of this article.

(Formerly 9-5.414. Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

9-5.419 Definitions.
As used in this article:

(a) “Affordable” shall be defined in accordance with California Health and Safety Code Section 50052.5, and in accordance with the following table, for moderate income median income, low income, and very low income households in accordance with the following table, and in accordance with the project’s being owner occupied or rente occupied:

Income Level	Owner-Occupied Project	Renter-Occupied Project
Moderate Income	35% of 110% of the Area Median Income	30% of 110% of the Area Median Income
Median Income	30% of 90% of the Area Median Income	30% of 80% of the Area Median Income
Low Income	30% of 70% of the Area Median Income	30% of 60% of the Area Median Income
Very Low Income	30% of 50% of the Area Median Income	30% of 50% of the Area Median Income

The City shall publish the annual home-sale price and rents allowable under this program on an annual basis.

(b) “Affordable unit” shall mean an ownership or rental housing unit, as required by this article, which is affordable to a household with moderate, median, low or very lov income.

(c) “Applicant” shall mean any person, firm partnership, association, joint venture, corporation, or any entity or combination of entities which seeks City permits and approvals.

(d) “Area median income” or “median income” shall mean the area median income published annually by the California Department of Housing and Community Developn for the County of Alameda.

(e) “At one (1) location” shall mean all adjacent land owned or controlled by the applicant, the property lines of which are contiguous at any point, or the property lines of which are separated only by a public or private street, road or other public or private right-of-way, or separated only by other land of the applicant.

(f) “Bedroom(s)” shall mean the number of rooms available predominantly as sleeping quarters. The City has a history of providing live/work space and other unusually structured living arrangements. For that reason, the City retains discretion in determining how many bedrooms a particular dwelling unit will contain so as to determine w price or rent will be required for eligibility as an affordable unit.

(g) “Dwelling unit” shall mean a dwelling designed for occupancy by one (1) household.

(h) “Housing costs” shall be defined in accordance with California Health and Safety Code Section 50052.5 and implementing regulations and shall generally mean the monthly mortgage principal and interest, property taxes and assessments, homeowners insurance, homeowner association fees where applicable, an allowance for utiliti and property maintenance and repairs, for ownership dwelling units; and the monthly rent, and allowance for utilities, fees or service charges charged to all tenants, for r dwelling units.

(i) “Income eligibility” shall mean the gross annual household income, considering the household size and number of dependents, income of all wage earners, elderly or disabled family members and all other sources of household income. For self-employed households, net annual household income shall be used in determining income eligibility.

(j) “Market-rate unit” shall mean an ownership or rental housing dwelling unit which is not an affordable unit.

(k) “Moderate, median, low and very low income households” means those households whose maximum income does not exceed levels published annually by the Califor Department of Housing and Community Development for the County of Alameda. Generally, “moderate income” is defined as one hundred one percent (101%) to one hundred twenty percent (120%) of median income, “median income” is defined as eighty-one percent (81%) to one hundred percent (100%) of median income, “low inco is defined as fifty-one percent (51%) to eighty percent (80%) of median income and “very low income” is defined as up to fifty percent (50%) of median income.

(l) “Nonresidential project” means any development of nonresidential uses in the City for which a discretionary permit or building permit is required, including an addition existing use, the new construction of gross square feet of nonresidential space, the conversion of residential use to a nonresidential use, or the conversion of one nonresidential use to another nonresidential use for which an affordable housing impact fee or larger affordable housing impact fee is required.

(m) “Operating agent of the City” shall mean a nonprofit organization, for-profit corporation, county or City agency chosen by the City to carry out some or all of the administrative provisions of this article.

(n) “Ownership residential project” means any residential project that includes the creation of one (1) or more residential dwelling units that may be sold individually. A residential ownership project includes the conversion of apartments to condominiums and residential rental projects having a recorded condominium plan.

(o) “Project” shall mean a housing development at one (1) location including all dwelling units for which permits have been applied for or approved within a twelve (12) m period.

(p) “Resale controls” shall mean legal restrictions by which the price of affordable units will be controlled to insure that the dwelling unit is affordable to moderate, low, ar very low income households over time.

(q) “Rental residential project” means any residential project that creates residential dwelling units that cannot be sold individually.

(r) “Residential project” means any development for which a discretionary permit or building permit is required and that includes the creation of one (1) or more additiona dwelling units, conversion of nonresidential uses to dwelling units, or a condominium conversion.

(s) “Substantial rehabilitation” means rehabilitation, the value of which constitutes twenty-five percent (25%) of the after rehabilitation value of the dwelling, inclusive of th land value.

(Formerly 9-5.415. Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-009, eff. Aug. 14, 2014)

Article 5. Density Bonus for Affordable Housing

9-5.501 Purpose.
The purpose of this article is to establish procedures for implementing State density bonus requirements, as set forth in California Government Code Sections 65915 thro 65918, and to increase the production of affordable housing, consistent with City policies. The bonuses for affordable housing in this article are distinguished from, and a addition to, other development bonuses available to projects that provide other public benefits, as provided by Section 9-4.204.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.502 Applicability.
The provisions of this article shall apply to the following development categories:

(a) New residential development projects of five (5) or more dwelling units, regardless of the type of dwelling units proposed. Applicant shall demonstrate that at least f (5) residential units can be developed on the project site in compliance with all zoning and development regulations.

(b) Where permitted or conditionally permitted by the underlying zoning designation of a site, mixed use developments that include at least five (5) dwelling units.

(c) Rehabilitation of one (1) or more multiple unit residential structures containing at least five (5) units that results in a net increase in the available residential units.

(d) Development that will change the use of an existing building from nonresidential to residential and that will provide at least five (5) residential units.

(e) Development that includes the conversion of at least five (5) residential units to ownership housing.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.503 Projects Eligible for Density Bonus.
(a) The City shall grant one (1) density bonus as described in Section 9-5.505, and incentives or concessions as described in Section 9-5.506, when an applicant for a residential development project agrees to construct at least any one (1) of the following:

(1) At least ten percent (10%) of the total dwelling units of a residential development project for low income households.

(2) At least five percent (5%) of the total dwelling units of a residential development project for very low income households.

(3) A senior citizen housing development or a mobile home park that limits residency based on age requirements for housing older persons pursuant to California Code Section 798.76 or 799.5.

(4) Ten percent (10%) of the total dwelling units in a common interest development as defined in California Civil Code Section 1351, for persons and families of moderate income;

provided, that all units in the development are offered to the public for purchase.

The applicant shall elect whether the density bonus shall be awarded on the basis of subsection (a)(1), (2), (3), or (4) of this section. A density bonus awarded under thi section allows a residential development to exceed the maximum residential density as provided by Section 9-4.203. The maximum residential density shall be the base density established in Table 9-4.203(a) and Figure 9-4.203(a). The granting of a density bonus, concession or incentive shall not be interpreted, in and of itself, to requir General Plan amendment, zoning change, or other discretionary approval. The density bonus shall not be included when determining the number of dwelling units that is equal to five (5%) or ten percent (10%) of the total dwelling units.

For those projects that are subject to the provisions of the Affordable Housing Set-Aside Program (Article 4 of this chapter) set-aside units may be counted toward the requirements of this section. To the extent that the provisions of this section and the affordable housing set-aside provisions are in conflict, the provisions of the Affordab Housing Set-Aside Program prevail.

(b) In addition, the following projects are eligible for a density bonus as provided in Section 9-5.505:

(1) Residential developments that include the donation of land.

(2) Residential developments that include child care facilities.

(3) Condominium conversions.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.504 Application Requirements.
An applicant shall file a written application in accord with the application procedures under Article 2 of Chapter 7 and any specific application requirements established b Director for this use.

(a) Application for density bonus shall be made concurrent with submittals required for the processing of associated discretionary permits. The request for density bonu shall be articulated as part of the description and justification for the development project. The request for the density bonus shall specify the percentage of density bonu sought, per Section 9-5.503, and indicate how the affordable housing obligations will be met.

(b) The review process for a density bonus project shall be the same as that required for associated discretionary permits. Discretionary actions on density bonus proje shall be subject to the same appeal process applied to associated discretionary permits.

(c) The application and approval of a density bonus and any associated incentives or concessions shall not require a separate permit or approval process from that otherwise required for the same project without a density bonus request.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.505 Amount of Density Bonus.
The amount of density bonus granted to a qualifying project shall be based on the category and percentage of affordable units proposed, as reflected in the following tab The maximum bonus shall be thirty-five percent (35%). The applicant may elect to accept a lesser percentage of density bonus. All density calculations resulting in fractio units shall be rounded up to the next whole number. The calculations are in accordance with California Government Code Section 65915 and are subject to any subsequ amendments or revisions thereto.

(a) Low Income Households. For residential development projects providing at least ten percent (10%) of the total dwelling units for low income households the density

bonus shall be calculated as follows:

Table 9-5.505(a)

Density Bonus for Low Income Units

Percentage Low Income Units	Percentage Density Bonus
10	20
11	21.5
12	23
13	24.5
14	26
15	27.5
16	29
17	30.5
18	32
19	33.5
20	35

(b) Very Low Income Households. For residential development projects providing at least five percent (5%) of the total dwelling units for very low income households th density bonus shall be calculated as follows:

Table 9-5.505(b)

Density Bonus for Very Low Income Units

Percentage Very Low Income Units	Percentage Density Bonus
5	20
6	22.5
7	25
8	27.5
9	30
10	32.5
11	35

(c) Senior Citizen Housing. For a senior citizen housing development or a mobile home park that limits residency based on age requirements for housing older persons pursuant to California Civil Code Section 798.76 or 799.5, the density bonus shall be twenty percent (20%) of the number of senior housing units.

(d) Moderate Income Common Interest Development. For a residential development that provides at least ten percent (10%) of the total dwelling units in a common inte development as defined in California Civil Code Section 1351, for persons and families of moderate income; provided, that all units in the development are offered to the public for purchase, the density bonus shall be calculated as follows:

Table 9-5.505(d)

Density Bonus for Moderate Income Common Interest Development

Percentage Low Income Units	Percentage Density Bonus
10	5
11	6
12	7
13	8
14	9
15	10
16	11
17	12
18	13
19	14
20	15
21	16

22	17
23	18
24	19
25	20
26	21
27	22
28	23
29	24
30	25
31	26
32	27
33	28
34	29
35	30
36	31
37	32
38	33
39	34
40	35

(e) Donation of Land.

(1) When an applicant for a residential development that provides at least ten percent (10%) of the total dwelling units for very low income households donates la the City in accordance with this section, the applicant shall be entitled to a minimum fifteen percent (15%) increase above the otherwise maximum allowable residen density for the entire development as follows:

Table 9-5.505(e)

Density Bonus for Donation of Land

Percentage Very Low Income Units	Percentage Density Bonus
10	15
11	16
12	17
13	18
14	19
15	20
16	21
17	22
18	23
19	24
20	25
21	26
22	27
23	28
24	29
25	30
26	31
27	32
28	33
29	34
30	35

(2) The density bonus for land dedication shall be in addition to any density bonus allowed under Section 9-5.503(a), up to a maximum combined increase of thirty percent (35%) if the applicant seeks an increase under this section. Nothing in this section shall be construed to enlarge or diminish the City's authority to require a developer to donate land as a condition of development.

(3) An applicant shall be eligible for the increased density bonus described in this section if all the following criteria are met:

a. The applicant donates and transfers the land to the City no later than the date of the approval by the City of the final subdivision map, parcel map, or reside development application.

b. The developable land and zoning classification of the land being transferred are sufficient to permit construction of units affordable to very low income households in an amount not less than ten percent (10%) of the residential units of the proposed development.

c. The transferred land is at least one (1) acre in size or of sufficient size to permit development of at least forty (40) units, has the appropriate General Plan designation, is appropriately zoned with appropriate development standards for development at the density described in California Government Code Section 65583.2, subdivision (c), paragraph 3, and is or will be served by adequate public facilities and infrastructure.

d. The transferred land shall have all of the permits and approvals, other than building permits, necessary for the development of the very low income housing units on the transferred land, not later than the date of approval of the final subdivision map, parcel map, or residential development application, except that the may subject the proposed development to subsequent design review to the extent authorized by California Government Code Section 65583.2(i), if the design i reviewed by the City prior to the transfer.

e. The transferred land and the affordable units shall be subject to a deed restriction, which shall be recorded on the property upon dedication, ensuring continued affordability of the units for at least thirty (30) years.

f. The land is transferred to the City or to a housing developer approved by the City.

g. The transferred land is within the proposed development or, if the City agrees, within one-quarter (1/4) mile of the boundary of the proposed development.

h. A proposed source of funding for the development of very low income units shall be identified not later than the date of approval of the final subdivision ma parcel map, or residential development application.

(f) Child Care Facility.

(1) When an applicant proposes to construct a residential development that conforms to the requirement of Section 9-5.503(a) and includes a child care facility th will be located on the premises of, as part of, or adjacent to the development, the City shall grant either of the following:

a. An additional density bonus that is in an amount of square feet of residential space that is equal to or greater than the amount of square feet in the child ca facility.

b. An additional concession or incentive designated by the City that contributes significantly to the economic feasibility of the construction of the child care fac

(2) In order to qualify for a density bonus as provided in this subsection the applicant shall submit for review and approval by the Director a financial report (pro fo for the proposed child care facility that includes sources of operating revenue to ensure that the center remains open and provides the promised services for the life the project.

(3) The City shall require, as a condition of approving the development, that:

a. The child care facility shall remain in operation as long as or longer than that time during which the affordable housing units are required to remain affordat pursuant to this section; and

b. Of the children who attend the child care facility, the children of very low income households, low income households, or families of moderate income households shall equal a percentage that is equal to or greater than the percentage of dwelling units that are made affordable to very low income households, income households, or moderate income households.

(4) Notwithstanding any requirement of this section, the City need not provide a density bonus or concession for a child care facility if it finds, based upon substan evidence, that Emeryville has adequate child care facilities.

(g) Condominium Conversion Developments.

(1) When a development is the conversion of an existing apartment complex to a condominium complex and the applicant agrees to make at least thirty-three per (33%) of the total units of the development affordable to moderate income households for thirty (30) years, or fifteen percent (15%) of the total units of the propose development affordable to low income households for thirty (30) years, and agrees to pay for the administrative costs incurred by the City to process the application to monitor the continued affordability and habitability of the affordable housing units, the City shall either:

a. Grant a density bonus of twenty-five percent (25%); or

b. Provide other incentives of equivalent financial value as determined by the City.

(2) Nothing in this section shall be construed to require the City to approve a proposal to convert apartments to condominiums.

(3) An applicant shall be ineligible for a density bonus or other incentives under this section if the apartments proposed for conversion are in a development for wh a density bonus or other incentives were previously provided under Section 9-5.503 or 9-5.506.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.506 Concessions and Incentives.

(a) An applicant for a density bonus provided by this article may request specific incentives or concessions and may request a meeting with the City.

(1) In addition to the applicable density bonus, qualifying projects shall receive the following number of incentives or concessions:

a. One (1) incentive or concession for projects that propose at least ten percent (10%) of the total units for lower income households, at least five percent (5% very low income households, or at least ten percent (10%) for persons and families of moderate income in a common interest development.

b. Two (2) incentives or concessions for projects that propose at least twenty percent (20%) of the total units for lower income households, at least ten percer (10%) for very low income households, or at least twenty percent (20%) for persons and families of moderate income in a common interest development.

c. Three (3) incentives or concessions for projects that propose at least thirty percent (30%) of the total units for lower income households, at least fifteen per (15%) for very low income households, or at least thirty percent (30%) for persons and families of moderate income in a common interest development.

(2) Proposals seeking concessions or incentives deemed necessary to exceed the base density allowance would not be subject to the otherwise required conditio use permit.

(3) For purposes of this section, concessions or incentives shall include, without limitation:

a. A reduction in site development standards or a modification of zoning code requirements or architectural design requirements that exceed the minimum bui standards approved by the California Building Standards Commission as provided in California Health and Safety Code Division 13, Part 2.5 (commencing with Section 18901), including, but not limited to, a reduction in setback and square footage requirements and in the ratio of vehicular parking spaces that would otherwise be required that results in identifiable, financially sufficient, and actual cost reductions.

b. Approval of mixed use zoning in conjunction with the housing project if commercial, office, industrial, or other land uses will reduce the cost of the housing development and if the commercial, office, industrial, or other land uses are compatible with the housing project and the existing or planned development in the areas where the proposed housing project will be located.

c. A reduction in the ratio of vehicular parking spaces and/or configurations as set forth in California Government Code Section 65915(p).

d. Other regulatory incentives or concessions proposed by the developer or the City that result in identifiable, financially sufficient, and actual cost reductions

(4) This section does not limit or require the City to provide direct financial incentives, including the provision of publicly owned land, or the waiver of fees or dedic requirements. However, the City will consider deferral of application processing fees on a case-by-case basis.

(5) The City shall grant the concession or incentive requested by the applicant unless the City makes a written finding, based upon substantial evidence, of any of following:

a. The concession or incentive is not required in order to provide for affordable housing costs as defined in California Health and Safety Code Section 50052. for rents for targeted units to be set as specified.

b. The concession or incentive would have a specific adverse impact, as defined in California Government Code Section 65589.5, subdivision (d), paragraph upon public health and safety or the physical environment or on any real property that is listed in the California Register of Historical Resources and for which t is no feasible method to satisfactorily mitigate or avoid the specific adverse impact, without rendering the development unaffordable to low or moderate income households.

c. The concession or incentive would be contrary to State or Federal law.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.507 Waiver or Reduction of Development Standards.

(a) An applicant may submit to the City a proposal for the waiver or reduction of development standards that will have the effect of physically precluding the constructio a development at the densities or with the concessions or incentives permitted under this section, and may request a meeting with the City. Nothing in this section shall b interpreted to require the City to waive or reduce development standards if the waiver or reduction would have a specific, adverse impact, as defined in California Government Code Section 65589.5, subdivision (d), paragraph (2), upon health, safety, or the physical environment, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact. Nothing in this section shall be interpreted to require a local government to waive or reduce development standards that would have an adverse impact on any real property that is listed in the California Register of Historic Resources, or to grant any waiver or reduction that v be contrary to State or Federal law.

(b) A proposal for the waiver or reduction of development standards pursuant to this section shall neither reduce nor increase the number of incentives or concessions which the applicant is entitled pursuant to Section 9-5.506.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.508 Vehicular Parking Ratio.

(a) Upon request of the developer, the following maximum parking ratio, inclusive of handicapped and guest parking, shall apply, pursuant to California Government C Section 65915:

(1) Zero (0) to one (1) bedroom: one (1) on-site parking space.

(2) Two (2) to three (3) bedrooms: two (2) on-site parking spaces.

(3) Four (4) or more bedrooms: two and one-half (2-1/2) parking spaces.

(b) If the total number of parking spaces required for a development is other than a whole number, the number shall be rounded up to the next whole number. A development may provide on-site parking through tandem parking or uncovered parking, but not through on-street parking. The applicant may also request a concessior an incentive pursuant to Section 9-5.506 to further lower the vehicle parking ratios from those described herein.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.509 Requirements for Participation.

In order for a developer or property owner to be eligible for density bonus the following requirements must be met:

(a) Any development permit that receives density bonus under this article shall have conditions attached which will assure compliance with the provisions of this article. conditions shall require a written agreement to indicate the number, type, location, approximate size, and construction scheduling of all dwelling units, the appropriate pr levels, provision for income certification and screening of potential purchasers and/or renters of affordable units and senior units, a resale control mechanism, if applicab and such reasonable information as shall be required by the City for the purpose of determining the applicant's compliance with this article.

(b) All affordable units and senior units in a project shall be constructed concurrently with or prior to the construction of any market-rate and nonsenior housing units.

(c) Unless the City finds compelling reasons to the contrary, the affordable units or senior units shall be dispersed throughout the development and shall be proportion to the mix and type of units in the project as a whole (with the exception that premium units such as penthouses and top floor view units shall not be required to be availe as affordable or senior housing units). Furthermore, the affordable units or senior units shall be comparable with the design of the base level market-rate units prior to purchaser-funded upgrades in terms of appearance, materials, and finished quality.

(d) The time period of availability as affordable or senior housing shall be for at least thirty (30) years. A longer period may be required for affordable housing set-aside units pursuant to Article 4 of this chapter, or as required by the construction or mortgage financing assistance program, mortgage insurance program, or rental subsidy program.

(e) The maximum allowable rents for affordable units shall be as defined in California Health and Safety Code Section 50053.

(f) Owner-occupied units shall be available at affordable housing costs, as defined in California Health and Safety Code Section 50052.5.

(g) For-sale affordable units may be subject to an equity sharing agreement, in the event that public subsidies are involved in the construction and/or purchase of said units.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.510 Definitions.
As used in this article:

(a) "Affordable" shall be as defined in Section 9-5.415.

(b) "Child care facility" means a facility installed, operated, and maintained for the nonresidential care of children as defined under applicable State licensing requireme for the facility.

(c) "Common interest development" as currently defined in California Civil Code Section 1351 and any subsequent amendments or revisions.

(d) "Concession" or "incentive" shall have the meaning set forth in California Government Code Section 65915(k).

(e) "Equivalent financial value" concerns a condominium conversion project and refers to the cost to the developer/property owner based on the land cost per dwelling The land cost per dwelling unit is determined by the difference in the value of the land with and without the density bonus.

(f) "Senior citizen housing development" as currently defined by California Civil Code Sections 51.3 and 51.12 and any subsequent amendments or revisions.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 6. Firearms and Ammunition Sales

9-5.601 Purpose.
This article establishes regulations governing sales of firearms and ammunition. The purpose of these regulations is to provide criteria for the consideration and approva businesses engaged in the sale of firearms and ammunition. The City finds it necessary to establish such requirements and criteria to regulate the sale of firearms and ammunition in the interest of the public health, safety and welfare.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.602 Home Occupations.
It is unlawful to engage in the business of selling, leasing, or otherwise transferring any firearm or ammunition as defined in this article as a Home Occupation as such te defined in Article 8 of this chapter.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.603 Districts Where Allowed.
It is unlawful to engage in the business of selling, leasing, or otherwise transferring any firearm or ammunition as defined in this article in any district other than the INH Heavy Industrial zone.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.604 Location Requirements.
It is unlawful to engage in the business of selling, leasing, or otherwise transferring any firearm or ammunition in the following locations:

(a) Within two hundred feet (200') of any area zoned for residential use;

(b) Within five hundred feet (500') of any other business engaged in sale of firearms and ammunition;

(c) Within one thousand feet (1,000') of any public park, religious institution or elementary or secondary school.

The distance between any two (2) businesses engaged in the business of selling, leasing or otherwise transferring any firearm or ammunition shall be measured in a stra line, without regard to intervening structures, from the closest exterior structural wall of each business. The distance between any business engaged in the business of selling, leasing or otherwise transferring any firearm or ammunition and any residential district, religious institution, school, or public park shall be measured in a straight without regard to intervening structures, from the closest property line of the residential zone, religious institution, school, or public park to the closest exterior structural of the business engaged in the business of selling, leasing or otherwise transferring any firearm or ammunition.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.605 Conditional Use Permit Required.
It is unlawful to engage in the business of selling, leasing, or otherwise transferring any firearm or ammunition without first obtaining a conditional use permit as provided this article. No final action may be taken by the Planning Commission until the Emeryville Police Department has issued a law enforcement permit as required by Chapter of Title 5. To grant a conditional use permit for the business of selling, leasing, or otherwise transferring any firearm or ammunition, the following findings must be made i addition to the findings required by Article 5 of Chapter 7:

(a) That the proposed business meets all of the location requirements of Section 9-5.604.

(b) That the proposed business will not be open between 5:00 p.m. and 9:00 a.m. daily.

(c) That the proposed business will comply with all applicable performance standards in Article 11 of this chapter.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.606 Conditions of Approval.
In approving a conditional use permit for a business engaged in the business of selling, leasing or otherwise transferring any firearm or ammunition, the Planning Commi may designate such conditions as it deems necessary in order to fulfill the purposes of this article, and may require reasonable guarantees and evidence that such cond

are being, or will be, complied with. Such conditions shall not be less restrictive than the conditions attached to the law enforcement permit issued by the Emeryville Polic Department, and may include, but are not limited to, designating hours of operation more restrictive than those listed in Section 9-5.605(b).

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.607 Definitions.

(a) "Ammunition" shall mean ammunition or cartridge cases, primers, bullets, or propellant powders designed for use in any firearm, and any component thereof, but sh not include blank cartridges or ammunition that can be used solely in an "antique firearm" as defined in Section 921(a)(16) of Title 18 of the United States Code.

(b) "To engage in the business of selling, leasing or otherwise transferring any firearm or ammunition" means to conduct a business by the selling, leasing or transferri any firearm or ammunition, or to hold one's self out as engaged in the business of selling, leasing or otherwise transferring any firearm or ammunition, or to sell, lease or transfer firearms or ammunition in quantity, in series, or in individual transactions, or in any other manner indicative of trade.

(c) "Firearm" shall mean any device, designed to be used as a weapon or modified to be used as a weapon, from which is expelled through a barrel a projectile by the of explosion or other means of combustion; provided, that the term "firearm" shall not include an "antique firearm" as defined in Section 921(a)(16) of Title 18 of the Unite States Code.

(d) "Public park" shall mean a park, playground, swimming pool, beach, pier, or athletic field within the City which is under the control, operation, or management of the City.

(e) "Religious institution" shall mean a building which is used primarily for religious worship and related religious activities.

(f) "School" shall mean an institution of learning for minors, whether public or private, which offers instruction in those courses of study required by the California Educa Code or which is maintained pursuant to standards set by the State Board of Education. This definition includes a nursery school, kindergarten, elementary school, junio high school, senior high school, or a special institution of learning under the jurisdiction of the State Department of Education, but it does not include a vocational or professional institution or any institution of higher education, including a community or junior college, college or university.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 7. Hazardous Waste Facilities

9-5.701 Purpose.

This article establishes regulations governing off-site Hazardous Waste Facilities. The purpose of these regulations is to provide criteria and procedures for the consider and approval of off-site Hazardous Waste Facilities which collect, store, transfer, treat or dispose of hazardous wastes and to be consistent with California Health and Sa Code Sections 25199 through 25199.14, applicable portions of the Alameda County Hazardous Waste Management Plan and the City of Emeryville General Plan. The C finds it necessary to establish such requirements and criteria to regulate Hazardous Waste Facilities in the interest of the public health, safety and welfare.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.702 Applicability.

(a) The requirements of this article are applicable to the siting and development of off-site hazardous waste treatment, storage, and transfer facilities. "Off-site Hazardo Waste Facilities" means those facilities which treat, store, recycle, incinerate or transfer hazardous wastes from at least two (2) producers of hazardous wastes which ar located on the same property of the Hazardous Waste Facility. Consistent with the Alameda County Hazardous Waste Management Plan, off-site Hazardous Waste Faci only include those facility types as defined by the plan for Small-Scale Transfer and Storage Facilities including hazardous waste collection facilities, and Industrial Trans Storage and Treatment Facilities.

(b) The off-site facility definition does not apply to:

(1) Transportable treatment units (TTU) which are designed to be moved either intact or in modules and which are intended to be operated at a given location for limited period of time; or

(2) Permanent on-site Hazardous Waste Facilities at locations where hazardous waste is produced, and which are owned by, leased to, or under the control of th producer of the waste.

(c) Facilities for the land disposal of hazardous wastes or treatment residues are prohibited in the City of Emeryville.

(d) All such facilities (i.e., off-site, on-site, household hazardous waste collection, and TTUs) shall obtain all necessary State licensing to install and operate.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.703 Conditional Use Permit Required.

It is unlawful to establish a Hazardous Waste Facility without first obtaining a conditional use permit as provided in this article pursuant to the procedures and required findings in Article 5 of Chapter 7.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.704 Location.

Hazardous Waste Facilities shall not be located within the following areas. All distances shall be measured from lot line to lot line.

(a) All Hazardous Waste Facilities.

(1) Two hundred feet (200') of an active or recently active seismic fault.

(2) Three hundred feet (300') of the San Francisco Bay shoreline or a critical habitat unless the applicant has demonstrated by risk assessment that a small buffe zone provides adequate protection for the environment and the public in the event of an accident.

(3) An area with twenty-five percent (25%) or greater slope or areas subject to liquefaction or subsidence unless the facility incorporates adequate engineered designed features which assure structural stability.

(4) An area of highly permeable soils or sediment, as defined in Title 23, California Code of Regulations, Chapter 15.

(b) Small-Scale Hazardous Waste Transfer and Storage Facilities.

(1) Five hundred feet (500') of any dwelling unit unless the applicant has demonstrated by risk assessment that a smaller buffer zone provides adequate protectio the public in the event of an accident.

(2) Five hundred feet (500') of an immobile population.

(3) A one hundred (100) year floodplain or an area subject to flooding by dam failure or tsunami, unless the project is protected by adequate engineered solutions designed to preclude flood failure.

(4) Recreational or scenic areas unless necessary to handle hazardous wastes generated by visitors, workers, or residents in the area.

(c) Industrial Hazardous Waste Transfer/Storage/Treatment Facilities.

(1) A one hundred (100) year floodplain or an area subject to flooding by dam failure or tsunami, unless the project is protected by adequate engineered solutions designed to preclude flood failure.

(2) Unless the applicant has demonstrated by risk assessment that a smaller buffer zone provides adequate protection for the public in the event of an accident:

a. Five hundred feet (500') of any dwelling unit or any area designated for residential use in this title; or

b. Two thousand feet (2,000') of any dwelling unit or any area designated for residential use in this title for facilities that will handle ignitable, explosive, or rea hazardous wastes.

(3) Unless the applicant has demonstrated by risk assessment that a smaller buffer zone provides adequate protection for the public in the event of an accident:

a. Five hundred feet (500') of any immobile population; or

b. Five thousand feet (5,000') of any immobile population for facilities that will handle ignitable, explosive, or reactive hazardous wastes.

(4) A recreational or scenic area.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.705 Application Requirements.
In addition to the documents required for a conditional use permit application pursuant to Article 5 of Chapter 7, an application for a conditional use permit for a Hazardo Waste Facility shall be accompanied by the following documents:

(a) A letter of justification describing the proposed Hazardous Waste Facility and explaining how it will satisfy the findings in Article 5 of Chapter 7.

(b) A preliminary geological study of the property and surrounding area which includes as deep a soils analysis as there are known aquifers, regardless of the potabilit those aquifers.

(c) Identification of the amounts (tonnage) and types of hazardous wastes to be managed at the Hazardous Waste Facility, the sources of these wastes, the ultimate disposition of the wastes, and the anticipated life of the project. Information shall be provided on the amount, sources, and types of hazardous wastes to be treated base an actual survey of the businesses to be served.

(d) Identification of travel routes to be used by generators and the owner/operator of the Hazardous Waste Facility for the transportation of hazardous wastes.

(e) A plan for public involvement with the proposed project prior to any Planning Commission public hearings. This plan will provide for adequate public testimony on th project in an effort to mitigate all public concerns prior to the Planning Commission's review and determination.

(f) A plan that identifies an ongoing monitoring program to ensure no release of any hazardous substance from the project site into the environment. This shall include ongoing monitoring required by other permitting agencies such as the State Department of Toxic Substances Control, the San Francisco Bay Regional Water Quality Cor Board, the Bay Area Air Quality Management District, the Federal Environmental Protection Agency, etc.

(g) A risk assessment which, at a minimum, studies the potential risks to public health, safety and the environment with attention to the proximity of the proposed site to residential uses, civil uses, environmentally sensitive areas, and groundwater.

(h) Evidence that all other necessary permits from regional, State and Federal agencies have been applied for or received.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.706 Noticing Requirements.
In addition to the noticing requirements set forth in Chapter 7, hearings and public notices shall be consistent with the applicable requirements of California Health and S Code Sections 25199 through 25199.14.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.707 Local Assessment Committee.
No later than thirty (30) days after an application for a Hazardous Waste Facility is accepted as complete, the City Council shall appoint a seven (7) member Local Assessment Committee (LAC) for each Hazardous Waste Facility application.

(a) Pursuant to California Health and Safety Code Section 25199.7(d), the City Council shall appoint a seven (7) member Local Assessment Committee (LAC). The City Council has discretion to appoint additional members to this committee as they deem appropriate. The membership, responsibilities and duties shall be consistent with th provisions of California Health and Safety Code Section 25199.7. The LAC shall cease to exist after the final administrative action has been taken by the State and local agencies on the permit applications for the project for which the LAC was formed.

(b) The City shall provide staff resources to assist the LAC in performing its duties as required by California Health and Safety Code Section 25199.7(d)(3).

(c) If the LAC and the applicant cannot resolve any differences through the meetings specified by State law, the State Office of Permit Assistance may assist in this resolution pursuant to California Health and Safety Code Section 25199.4, as required by California Health and Safety Code Section 25199.7(h).

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.708 Conditions of Approval.
In approving a conditional use permit for a Hazardous Waste Facility, the Planning Commission may designate such conditions as it deems necessary in order to fulfill the purposes of this article, and may require reasonable guarantees and evidence that such conditions are being, or will be, complied with. Such conditions may include, but not limited to, the following:

(a) An increase in the amount of liability insurance required under State law for such facilities whether or not a Hazardous Waste Facility is required to comply with such State law.

(b) An agreement to indemnify the City of Emeryville in the event of a spill or release of hazardous wastes or any constituents thereof into the environment.

(c) Installation of containment structures for hazardous waste releases capable of withstanding failure due to geologic, soil or other failures.

(d) Compliance with all applicable laws, regulations, ordinances and orders of any governmental agency. The owner/operator of the Hazardous Waste Facility shall provide the City with notice within three (3) days of any violation or noncompliance with any applicable law, regulation, ordinance or order.

(e) Plans and procedures for notifying property owners and occupants within a five-hundred-foot (500') radius of the facility of any accidental releases of hazardous substances into the environment.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.709 Appeals.
The Planning Commission's decision on a conditional use permit for a Hazardous Waste Facility may be appealed to City Council in accordance with the appeal procedure Article 14 of Chapter 7. A final decision of the City Council regarding a conditional use permit for a Hazardous Waste Facility may be further appealed to the Governor of State of California or the Governor's designee pursuant to California Health and Safety Code Section 25199.9.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 8. Home Occupations

9-5.801 Purpose.
This article establishes regulations governing Home Occupations. The purpose of the regulations contained in this article is to provide criteria and procedures for the consideration and approval of Home Occupations. The City finds it necessary to establish such requirements and criteria to regulate Home Occupations in the interest of public health, safety and welfare.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.802 Business License and Zoning Compliance Review Required.
A Home Occupation shall require a business license pursuant to Chapter 1 of Title 3 and a zoning compliance review pursuant to Article 3 of Chapter 7. In approving a zoning compliance review for a Home Occupation, the Director may designate reasonable conditions deemed necessary to comply with the regulations in Section 9-5.80

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.803 Uses Permitted.
Any use, except those listed in Section 9-5.804, may be a Home Occupation if the Director determines that it will comply with all of the regulations set forth in Section 9-5

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-001, eff. Mar. 6, 2014)

9-5.804 Uses Excluded.
None of the following uses or activities shall be a Home Occupation:

(a) Uses of Special Concern. Any use of special concern, as listed in Section 9-2.701, shall not be a Home Occupation.

(b) Commercial Hauling. A commercial hauling business shall not be a Home Occupation.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.805 Regulations.
A Home Occupation shall comply with all of the following regulations:

(a) A Home Occupation shall not change the residential character of the dwelling unit or adversely affect other uses.

(b) A Home Occupation shall take place within the dwelling unit or garage, or accessory building that is incidental to the principal residential use.

(c) Outdoor storage associated with a Home Occupation is prohibited.

(d) A Home Occupation shall not exceed forty percent (40%) of the dwelling unit's square footage and shall not exceed a maximum of four hundred (400) square feet of indoor space.

(e) Plants and animals may be grown or kept in outdoor areas of the subject premises as part of the Home Occupation.

(f) Displays and signage advertising the Home Occupation are prohibited.

(g) A Home Occupation shall not have more than one (1) associated vehicle that shall not exceed twenty feet (20') in length. The associated vehicle shall not have more than four (4) square feet of signage related to the Home Occupation.

(h) Employees must be residents of the dwelling unit in which the Home Occupation is located, with the exception of one (1) nonresident, full-time equivalent employee

(i) A Home Occupation shall not have more than five (5) clients on the premises at any given time, and shall not have more than ten (10) clients at the premises in any given business day.

(j) Nonresident employees and clients shall only be at the premises between 8:00 a.m. and 9:00 p.m.

(k) On-site sales shall be limited to those items physically produced or manufactured within the dwelling unit, garage, or accessory buildings that are part of the Home

Occupation, except for plants and animals, which may be grown or kept in outdoor areas of the subject premises.

(l) A Home Occupation that involves hazardous materials or processes shall require Fire Department approval. A Home Occupation shall not create offensive or objectionable noise, vibration, odors, smoke, fumes, heat, dust, dirt, glare or electrical disturbance perceptible by the average person beyond the lot line or party walls o multi-unit buildings of the subject premises.

(m) A Home Occupation shall comply with all other applicable provisions of these planning regulations, including but not limited to the performance standards in Article this chapter; all other applicable provisions of the Emeryville Municipal Code; and all other applicable local, State, and Federal laws and regulations.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 9. Live/Work

9-5.901 Purpose.
This article establishes regulations governing Live/Work Units. The purpose of these regulations is to provide space that allows for a flexible combination of residential ar nonresidential uses to meet the changing needs of the Emeryville community. The intent is to encourage small, independent, and creative businesses and artistic endeav throughout the City.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.902 Applicability.
The provisions of this article apply to any new or existing Live/Work Unit or Live/Work building, including conversions of existing residential and nonresidential buildings t Live/Work buildings, conversions of Live/Work buildings to wholly residential or nonresidential uses, and any change of use or occupancy in a Live/Work building.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.903 Conditional Use Permit Required.
Occupancy of a Live/Work building shall require approval of a conditional use permit pursuant to the procedures and required findings in Article 5 of Chapter 7.

(a) Eligible Applicants. The following persons shall be eligible to apply for a conditional use permit for a Live/Work building:

(1) The owner of the Live/Work building or Live/Work Unit.

(2) An authorized agent of the owner of the Live/Work building or Live/Work Unit.

(3) The occupant of the Live/Work Unit with the express written permission of the building owner.

(b) To Whom Granted. The conditional use permit for occupancy of a Live/Work building shall be granted to the owner of the building or Live/Work Unit.

(c) Notification of Occupants. A copy of the conditional use permit, showing the conditions of approval, shall be provided to all occupants of Live/Work Units in the build prior to their execution of a lease or purchase agreement for such Live/Work Unit.

(d) Exception: Existing Live/Work Building. If a valid conditional use permit exists for a Live/Work building on the effective date of the adoption of this article, no additior conditional use permit shall be required for that building in order to meet the requirements of this section.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.904 Occupancy of Live/Work Unit.
The owner or occupant of a Live/Work Unit shall receive zoning compliance approval pursuant to Article 3 of Chapter 7. The zoning compliance approval shall identify th occupant(s) and use(s) of the Live/Work Unit and demonstrate compliance with the conditional use permit which was issued for the building.

(a) Exception: Existing Live/Work Units. If the owner or occupant has received zoning compliance approval for a Live/Work Unit on the effective date of the adoption of article, no additional zoning compliance approval is required for that unit in order to meet the requirements of this section unless the use or occupancy is subsequently changed.

(b) Posting of Zoning Compliance Approval. The zoning compliance approval for a Live/Work Unit shall be posted in the work portion of the Live/Work Unit.

(c) Change of Use or Occupancy. The owner or occupant of a Live/Work Unit shall notify the City of any proposed change in use or occupancy. Any change of use or occupancy shall require a new zoning compliance approval pursuant to Article 3 of Chapter 7.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.905 Location and Activity Requirements.
(a) Location.

(1) Heavy Live/Work Units, as defined in Section 9-2.331(a), are permitted in the INH zone, subject to a conditional use permit pursuant to Article 5 of Chapter 7.

(2) Light Live/Work Units, as defined in Section 9-2.331(b), are permitted in the RM, RMH, RH, MUR, MURS, MUN, OT, and INL zones, subject to a conditional us permit pursuant to Article 5 of Chapter 7.

(b) Activity. The work activity associated with a Live/Work Unit must be permitted or conditionally permitted in the zoning district where it will be located as indicated in Chapter 3; provided, however, that if the unit is in a residential zone, the work activity must be allowed by the regulations for the MUR Mixed Use with Residential zone.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.906 Incompatible Use Types.
The following use types are deemed incompatible with Live/Work Units, and shall not be permitted in any Live/Work building; nor shall Live/Work Units be permitted in an building which contains the following use types:

(a) Uses of Special Concern. Any use of special concern, as listed in Section 9-2.701.

(b) Commercial and Institutional Use Types.

Animal Care and Sales (all)

Motor Vehicle Sales and Services (all)

Eating and Drinking Establishments

Bars/Nightclubs/Lounges

Emergency Shelters

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.907 Live/Work Standards.

Live/Work buildings shall comply with the following standards, unless specifically waived in accordance with Section 9-5.910. The Planning Commission may increase any requirement, up to what normally would be required for the business activities which may be associated with the proposed Live/Work Units, if determined to be necessary protect the public health, safety and welfare.

(a) Building Size. A Live/Work building shall not exceed the floor area ratio as specified in Article 2 of Chapter 4.

(b) Unit Size and Living Area.

(1) The floor area of each Live/Work Unit shall be no less than seven hundred fifty (750) square feet and no more than two thousand (2,000) square feet, unless applicant demonstrates that less or more space is appropriate to the proposed use.

(2) Not more than fifty percent (50%) of the floor area of each Live/Work Unit shall be devoted to living area except that in residential zones not more than eighty percent (80%) of each Live/Work Unit shall be devoted to living area.

(c) Parking and Loading. Off-street parking and loading shall be provided as required by Article 4 of Chapter 4.

(d) Open Space. Open space shall be provided as required by Article 3 of Chapter 4.

(e) Performance Standards. All Live/Work Units and Live/Work buildings shall comply with the applicable performance standards in Article 11 of this chapter.

(f) Ventilation. All Live/Work Units shall be provided with at least one (1) operable window. A ventilation system shall be installed subject to the approval of the Chief Building Official and Fire Marshal for any Live/Work activity which requires additional ventilation or which generates hazardous fumes or dust.

(g) Mixed Occupancies. If a building contains mixed occupancies of Live/Work Units and other uses, occupancies other than Live/Work shall meet all applicable requirements for those uses, and proper occupancy separations shall be provided between the Live/Work Units and other occupancies, as determined by the Chief Build Official.

(h) Additional Requirements. Live/Work Units and buildings must comply with any additional requirements imposed by the Planning and Building, Fire, Police and Public Works Departments as necessary to protect the public health, safety and welfare.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.908 Residential Zones.

Live/Work Units and buildings located in residential zones are subject to the following additional standards:

(a) On-Premises Sales. On-premises sales of goods not produced within the Live/Work building by an occupant of a Live/Work Unit are not permitted.

(b) Work Restricted to Occupants. Work on the premises of a Live/Work Unit shall be limited to persons who live in the Live/Work Unit with the exception of one (1) nonresident, full-time equivalent employee.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.909 Existing Live/Work Buildings.

Any building which contains one (1) or more Live/Work Units on the effective date of the adoption of this article, and has valid permits for such Live/Work Units, need not meet the parking, loading, and open space requirements of Section 9-5.907. The parking, loading, and open space which existed on the effective date of the ordinance codified in this article shall not be reduced to levels below those required by this article.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.910 Waiver or Reduction of Standards.

In approving a conditional use permit for Live/Work Units, the Director or Planning Commission, as the case may be, may waive or reduce any requirement or portion of a requirement identified in Section 9-5.907 if all of the following findings are made in addition to the findings required by Article 5 of Chapter 7:

(a) That the Live/Work Units are provided within a building which was in existence on the effective date of the initial adoption of this article.

(b) That the Live/Work Units are provided within a building which is structurally sound or improved so that it is structurally sound.

(c) That the Live/Work Units are provided within a building which is consistent with the architectural character of neighboring buildings or which is improved in order to consistent.

(d) That the requirements of Section 9-5.907 cannot be met due to site or building constraints.

(e) That human health, safety and welfare will not be adversely affected due to such waiver.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-001, eff. Mar. 6, 2014)

9-5.911 Review Criteria.

In reviewing an application for a conditional use permit for Live/Work Units, the Planning Commission shall consider and give preference for projects which incorporate th following:

(a) Compatibility of the Live/Work building with neighboring uses.

(b) Activities involving artistic endeavors.

(c) Low-income housing.

(d) Separation of work activities from living areas, where work activities could present threats to human health and safety.

(e) Ground floor commercial activity.

(f) Adequate traffic circulation.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.912 Conditions of Approval.
In approving a conditional use permit for Live/Work Units, the Planning Commission may designate such conditions as it deems necessary to protect the public health, sa and welfare, and may require reasonable guarantees and evidence that such conditions are being, or will be, complied with. Such conditions may include, but are not lim to, the following:

(a) Building Management. A building manager shall be designated for the Live/Work building to serve as a liaison between City personnel and Live/Work occupants, ar between Live/Work occupants and commercial or industrial occupants. The building manager shall be provided with a copy of all occupancy permits, and shall notify the of any changes in use or occupancy. The building manager shall report any infringements of permit conditions. The owner of the Live/Work building shall inform the Direc of the name and telephone number of the building manager, and shall notify the Director of any changes thereto.

(b) Inspections. Live/Work Units shall be subject to periodic inspections by the City's fire, building, health and safety personnel from 9:00 a.m. to 5:00 p.m. on all days except Saturdays, Sundays, and City holidays.

(c) Written Notice. For Live/Work buildings located in industrial zones, the owner of the Live/Work building shall provide written notice to all Live/Work Unit occupants th the surrounding area may be subject to levels of noise, dust, fumes or other nuisances at higher levels than would be expected in residential areas. Specific sources of t nuisances may be identified if appropriate and if possible.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.913 Conversion of Live/Work Buildings.
(a) Nonresidential Zone. In a nonresidential zone, any Live/Work building may be converted to wholly nonresidential uses which are permitted in that zone.

(b) Residential Zone. In a residential zone, no Live/Work building may be converted to wholly nonresidential uses; however, it may be converted to wholly residential us

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 10. Nonconforming Uses and Structures

9-5.1001 Purpose.
This article establishes regulations for nonconforming uses and structures. The purpose of these provisions is to regulate uses of land and structures that were legal bef the adoption or amendment of these planning regulations, but which no longer comply. The intent of this article is to permit nonconforming uses to continue until they are removed or required to be terminated, but not to encourage their survival. More specifically, it is the intent of this article to distinguish between incompatible nonconformi uses that are detrimental to public health, safety, and general welfare, and nonconforming uses that are economically productive and compatible with surrounding development despite being inconsistent with the use regulations of these planning regulations.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1002 Applicability.
The provisions of this article apply to uses that have become nonconforming by adoption of these planning regulations, uses that were previously nonconforming and rer nonconforming under these planning regulations, and uses that become nonconforming due to subsequent amendments to these planning regulations, except as provid Section 9-5.1003.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1003 Exceptions.
The provisions of this article do not apply in the following situations:

(a) Signs. Nonconforming signs shall be subject to the provisions of Section 9-5.1614.

(b) Residential Uses. Any residential use, lot, or structure that was legally established prior to the adoption of these planning regulations and that has been continuous maintained in residential use in compliance with the requirements of all applicable codes is deemed to be a conforming use, lot, or structure. However, any enlargement replacement of such use shall conform to these planning regulations.

(c) General Manufacturing Uses. Any General Manufacturing use, lot, or structure in the INL Light Industrial zone that was legally established prior to the adoption of th planning regulations and that has been continuously maintained in compliance with the requirements of all applicable codes is deemed to be a conforming use, lot, or structure. However, any enlargement or total replacement of such use shall conform to these planning regulations.

(d) Public Uses. Provided that there is no change of use, nothing in this article shall require the termination, discontinuance, or removal of a public use or a public utility to prevent the expansion, modernization, replacement, repair, maintenance, alteration, reconstruction, or rebuilding and continuation of public use or utility buildings, structures, equipment, and facilities.

(e) Planned Unit Developments. Planned unit developments approved prior to the adoption of these planning regulations, as listed in Section 9-3.310, are subject to th use and development regulations stipulated in the various ordinances establishing the PUDs. If the ordinance for a PUD does not address a particular issue, these planr regulations shall apply to that issue. Any modifications to such PUDs shall be subject to the provisions of these planning regulations.

(f) Other Planning Entitlements. Any use allowed under a planning entitlement, including but not limited to a conditional use permit, design review permit, or variance, th was approved prior to the adoption of these planning regulations and that has not expired, is deemed to be a conforming use and is subject to any conditions included ir approval. If such a use is not permitted by these planning regulations, it may be expanded pursuant to Section 9-5.1011, except those uses that are deemed incompatib pursuant to Section 9-5.1007. Other modifications to such a use beyond what was originally approved shall be subject to the provisions of these planning regulations.

(g) Structures under Construction. Nothing contained in this article shall be deemed to require any change in the plans, construction, or designated use of any building structure for which a building permit has properly been issued prior to the adoption of these planning regulations.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1004 Nonconforming Uses as Distinguished from Illegal Uses.

(a) Nonconforming Use. A nonconforming use is any use of land, use of structure, lot, or structure that was legally established prior to the adoption of these planning regulations, but which does not conform to the provisions of these planning regulations. Nonconforming uses may be continued, maintained, repaired, altered, substituted another nonconforming use, expanded, restored or reestablished only in conformance with the requirements of this article.

(1) Nonconforming uses include:

a. Uses made nonconforming by the addition of a standard or requirement in these planning regulations that was not previously required for such use; and

b. Uses that were previously permitted by right and are subject to a discretionary permit under the requirements of these planning regulations.

(2) A nonconformity may result from any inconsistency with the requirements of these planning regulations, including but not limited to location, density, floor area (FAR), height, setback, usable open space, parking, or performance standards or the lack of a conditional use permit, variance, or other required planning entitleme

(3) A use or structure shall not be deemed nonconforming solely because it does not conform with the applicable design standards for parking lots and structures pursuant to Section 9-4.406, allowed projections above the top of buildings pursuant to Section 9-4.202(c), or restrictions on features allowed in required yards pursuant to Section 9-4.301(e), or because of other minor deviations from the requirements of these planning regulations.

(b) Illegal Use. An illegal use is a use of land, use of structure, lot, or structure that was not legally established under the regulations that were applicable at the time it established, whether before or after the adoption of these planning regulations. Any such illegal use is hereby declared to be a public nuisance and shall be discontinue legalized immediately.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1005 Effect of Conditional Use Permit on Nonconforming Uses.

(a) Use Remains Nonconforming. Any nonconforming use that is substituted, expanded, restored or reestablished pursuant to a conditional use permit as provided in t article shall still be considered a nonconforming use in its entirety and shall be subject to all applicable provisions of this article.

(b) Conditions of Approval. In approving a conditional use permit to substitute, expand, restore, or reestablish a nonconforming use, conditions of approval may be imp as deemed necessary to fulfill the purposes of this article, and reasonable guarantees and evidence may be required that such conditions are being, or will be, complied Such conditions may include, but are not limited to, requiring additional landscaping, screening, and other site improvements; and establishing a time limit and terminatio date for the nonconforming use.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1006 Determination of Legal Nonconforming Uses.

The Director shall determine whether a use is nonconforming and whether it was legally established. The Director's determination may be appealed to the Planning Commission in accordance with the appeal procedures in Article 14 of Chapter 7.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1007 Incompatible Uses.

Uses of special concern, as listed in Section 9-2.701, that are prohibited in the zoning district in which they are located, as indicated in Article 2 of Chapter 3, are hereby declared to be incompatible uses and may be continued but shall not be expanded, substituted for another nonconforming use, or reestablished if abandoned for more t ninety (90) days. An incompatible use may be substituted with a nonconforming use that is not an incompatible use pursuant to the requirements of Section 9-5.1010(d).

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1008 Nonconforming Lots.

Any lot that is smaller than the minimum size or width required by Article 7 of Chapter 4 may be developed subject to all other requirements of these planning regulations is described in the official records on file in the office of the Alameda County Recorder as a lot of record.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-001, eff. Mar. 6, 2014)

9-5.1009 Continuation and Maintenance of Nonconforming Uses and Structures.

(a) Right to Continue. Any nonconforming use or structure may be continued and maintained indefinitely if it has remained in continuous existence since the adoption o these planning regulations. The right to continue a nonconforming use or structure shall run with the land. Any substitution, expansion, restoration or reestablishment of nonconforming use or structure shall be subject to the requirements of this article.

(b) Maintenance and Repairs. Maintenance, repairs, and structural interior alterations to a nonconforming structure are permitted if the changes and improvements do expand the structure, except as provided in Section 9-5.1011.

(c) Additions and Alterations to Nonconforming Public Uses. Additions, extensions, and alterations may be made to any nonconforming public use, including but not lim to schools, parks, recreation facilities, police stations, and fire stations, if the addition, extension, or alteration:

(1) Does not extend beyond the boundaries of the site in existence when the use became nonconforming;

(2) Does not reduce any off-street parking required by Article 4 of Chapter 4; and

(3) Complies with the applicable performance standards in Article 11 of this chapter.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1010 Changes and Substitutions of Nonconforming Uses.

A nonconforming use may be changed to a conforming use or substituted with another nonconforming use subject to the requirements of this section. These requiremen shall not apply to a change of ownership, tenancy, or management where there is no change in use type and the use is not expanded.

(a) Change from Nonconforming to Permitted Use. Any nonconforming use may be changed to a use that is permitted by right in the zoning district in which it is locatec that complies with all applicable standards for such use. Any such change in use terminates the right of the previous nonconforming use to continue to exist, and it may r be reestablished.

(b) Change from Nonconforming to Conditionally Permitted Use. Any nonconforming use may be changed to a use that is conditionally permitted in the zoning district ir which it is located, subject to the approval of a conditional use permit pursuant to Article 5 of Chapter 7 and any other applicable findings and standards for the new use. such change in use terminates the right of the previous nonconforming use to continue to exist, and it may not be reestablished.

(c) Absence of Permit. Any use that is nonconforming solely by reason of the absence of a conditional use permit may be changed to a conforming use by obtaining a r conditional use permit, subject to all applicable findings and requirements for the use.

(d) Substitution. A nonconforming use may be substituted with another nonconforming use that is not an incompatible use as defined in Section 9-5.1007 upon the app of a minor conditional use permit. To grant such a conditional use permit the following findings must be made in addition to the findings required by Article 5 of Chapter 7

(1) The proposed new use will not be detrimental to the public health, safety, or welfare.

(2) The proposed new use will not impede the redevelopment or use of nearby properties in compliance with the General Plan.

(3) The proposed new use will be no less compatible with the purposes of the zoning district where it is located than the nonconforming use it replaces.

(4) The proposed new use will not increase the nonconformity with respect to density, floor area ratio (FAR), height, setback, usable open space, or parking.

(5) The proposed new use will comply with the applicable performance standards in Article 11 of this chapter.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1011 Expansion of Nonconforming Structures and/or Uses.

A nonconforming structure and/or use that is not an incompatible use as defined in Section 9-5.1007 may be expanded upon the approval of a minor conditional use per Any increase in bonus density, floor area ratio, or height shall require a conditional use permit pursuant to Section 9-4.204. To grant a conditional use permit for the expansion of a nonconforming structure and/or use, the following findings must be made in addition to the findings required by Article 5 of Chapter 7:

(1) The proposed expansion will not be detrimental to the public health, safety, or welfare.

(2) The proposed expansion will not impede the redevelopment or use of nearby properties in compliance with the General Plan.

(3) The proposed expansion will not increase the nonconformity with respect to density, floor area ratio (FAR), height, setback, usable open space, or parking.

(4) Any proposed expansion of the structure's floor area shall comply with the parking and loading requirements of Article 4 of Chapter 4 for the new floor area.

(5) The proposed expansion will comply with the applicable performance standards in Article 11 of this chapter.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1012 Restoration of Damaged Nonconforming Structures and/or Uses.

A nonconforming structure and/or use that is damaged or partially destroyed by fire, explosion, earthquake or other unintentional act may be restored or rebuilt, subject the following provisions:

(a) Damage Not More Than Seventy-Five Percent (75%). If the damage does not exceed seventy-five percent (75%) of its replacement cost, not including the foundati immediately prior to the date that the damage occurred, the structure may be restored and the nonconforming use may be resumed; provided, that an application for a building permit for the restoration work is submitted within six (6) months of the date that the damage occurred and that the restoration work is diligently pursued so that building permit does not expire. If an application for a building permit is not submitted within six (6) months, or if the building permit expires, the right of the previous nonconforming structure and/or use to continue to exist shall terminate, and they may not be reestablished.

(b) Damage More Than Seventy-Five Percent (75%). If the damage exceeds seventy-five percent (75%) of its replacement cost, not including the foundation, immediat prior to the date that the damage occurred, the structure may be restored and the nonconforming use may be resumed, except an incompatible use as defined in Sectio 5.1007, upon the approval of a minor conditional use permit. If an application for a conditional use permit is not submitted within six (6) months of the date that the dama occurred, or if an application for a building permit is not submitted within six (6) months of approval of the conditional use permit, or if the building permit expires, the righ the previous nonconforming structure and/or use to continue to exist shall terminate, and they may not be reestablished. To grant a conditional use permit for the restora of a nonconforming structure and/or use, the following findings must be made in addition to the findings required by Article 5 of Chapter 7:

(1) The proposed restoration will not be detrimental to the public health, safety, or welfare.

(2) The proposed restoration will not impede the redevelopment or use of nearby properties in compliance with the General Plan.

(3) The proposed restoration will not increase the nonconformity with respect to density, floor area ratio (FAR), height, setback, usable open space, or parking.

(4) The proposed restoration will comply with the applicable performance standards in Article 11 of this chapter.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1013 Reestablishment of Abandoned Nonconforming Uses.

An abandoned nonconforming use may be reestablished subject to the requirements of this section. A nonconforming use shall be deemed to be abandoned when the s vacated, the business license lapses, utilities are terminated, or the lease is terminated.

(a) Replacement by a Conforming Use. If an abandoned nonconforming use is replaced by a conforming use, the right of the previous nonconforming use to continue t exist shall terminate and it may not be reestablished.

(b) Nonconforming Use Abandoned for Ninety (90) Days or Less. A nonconforming use that is abandoned for ninety (90) days or less, including an incompatible use as defined in Section 9-5.1007, may be reestablished, or may be substituted with another nonconforming use pursuant to the requirements of Section 9-5.1010(d).

(c) Nonconforming Use Abandoned for More Than Ninety (90) Days but Less Than One (1) Year. A nonconforming use that is abandoned for more than ninety (90) da but less than one (1) year, and that is not an incompatible use as defined in Section 9-5.1007, may be reestablished upon the approval of a minor conditional use permit

may be substituted with another nonconforming use pursuant to the requirements of Section 9-5.1010(d). To grant a conditional use permit for the reestablishment of an abandoned nonconforming use the following findings must be made in addition to the findings required by Article 5 of Chapter 7:

(1) The reestablished use will not be detrimental to the public health, safety, or welfare.

(2) The reestablished use will not impede the redevelopment or use of nearby properties in compliance with the General Plan.

(3) The reestablished use will not increase the nonconformity with respect to density, floor area ratio (FAR), height, setback, usable open space, or parking.

(4) The reestablished use will comply with the applicable performance standards in Article 11 of this chapter.

(d) Nonconforming Use Abandoned for One (1) Year or More. If a nonconforming use is abandoned for one (1) year or more, its right to continue to exist shall terminat and it may not be reestablished or substituted with another nonconforming use.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-001, eff. Mar. 6, 2014)

9-5.1014 Abatement.

The provisions of this article shall not apply to a nonconforming use or structure which is, or which becomes, a public nuisance. If a nonconforming structure or use is fou to constitute a public nuisance, appropriate abatement action may be taken by the City in compliance with Article 15 of Chapter 7.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 11. Performance Standards

9-5.1101 Purpose.

The purpose of these performance standards is to control and limit dangerous or objectionable environmental effects generated by, or inherent to, the use of land or buildings.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1102 Applicability.

(a) New Uses. These performance standards shall apply to the operation of all new uses established after the effective date of the ordinance codified in these regulatio

(b) Existing Uses. These performance standards shall generally not apply to the ongoing operations of uses in existence on the effective date of the ordinance codifiec these regulations or of a subsequent rezoning or other amendment applying more restrictive performance standards to such uses, with the following stipulations:

(1) Existing uses shall be subject to any applicable performance standards that were in effect prior to the effective date of the ordinance codified in these regulatio

(2) The operations of existing uses shall not be so changed as to result in a greater degree of nonconformity with respect to these performance standards.

(3) Any expansion of an existing use shall be required to conform to these performance standards.

(4) The establishment of a new use in proximity to an existing use shall not require the existing use to change its operations to comply with these performance standards.

(5) Any existing use that is a legal conforming use with respect to these regulations, and that ceases operations for a period of one (1) year or more, shall comply these performance standards upon resuming operations. Any existing use that is nonconforming with respect to these regulations shall be subject to the applicable provisions for nonconforming uses in Article 10 of this chapter and, if allowed to resume operations, shall comply with these performance standards.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1103 Proof of Compliance.

The Director may require the applicant for a building permit or business license to submit such information with respect to proposed equipment, machinery, processes, products, or environmental effects as may be necessary to demonstrate the ability of the proposed use to comply with these performance standards. Such required information may include reports by expert consultants. Any such requirement, and any determination by the Director as to sufficiency of proof, may be appealed to the Planning Commission in accordance with the appeal procedures in Article 14 of Chapter 7.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1104 Measurements.

When measurements are necessary in the enforcement of these performance standards, they shall be made by competent professionals in the applicable field, in accordance with accepted professional practice.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1105 Air Quality: Noxious Materials.

All existing or proposed uses producing dust, dirt, ash, charred paper, soot, grime, carbon or other noxious material which can or may cause damage to the health of an individual, animal or vegetation, damage to property, or the physical soiling or discoloring of the surfaces of any structure or materials located outside the property lines the parcel of land from which such emission emanates shall have the source of the contaminant muffled or controlled in a manner that will prevent the issuance, continua or recurrence of any emission that is, or may be, detectable beyond the property line of the premises. All uses shall comply with the requirements of the Bay Area Quality Management District.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1106 Air Quality: Noncontaminated Emissions.

All existing or proposed uses shall have all intakes and exhausts on all air-handling equipment designed, installed, and operated in such a manner so as to prevent any perceptible acceleration of air movement across property lines. Cooling towers and condensers shall be designed, installed, and operated in a manner which will preven water spray from being carried across property lines.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1107 Light and Glare.

All lighting, reflective surfaces, or any other sources of illumination shall be utilized in a manner which produces no glare on public streets or on any other parcel. Lights

be shielded so as not to be directly visible from an adjoining residential property, except for low level lighting such as interior lights and porch lights.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1108 Liquid or Solid Waste.

The use, handling, storage and transportation of waste materials, including hazardous wastes, shall comply with Chapter 8 of Title 7, Wastewater Collection System; California Health and Safety Code Section 25100 et seq., Hazardous Waste Control; and any other applicable laws. See also Article 7 of Chapter 5, Hazardous Waste Facilities.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1109 Noise.

(a) Noise Ordinance. All uses and activities shall be subject to the applicable provisions of the noise regulations in Chapter 13 of Title 5.

(b) Siting of New Uses. The community noise compatibility standards in Figure 6-11 of the General Plan shall be used as review criteria for new uses. These standards indicate the level of existing ambient noise to which such new uses may be exposed. Noise generated by such uses shall be regulated by subsection (c) of this section.

Table 9-5.1109

Maximum Permitted Noise Level (dBA)

Zone		Daytime Weekdays 7 a.m. to 9 p.m. Weekends 8 a.m. to 9 p.m.	Nighttime Weekdays 9 p.m. to 7 a.m. Weekends 9 p.m. to 8 a.m.
RM Medium Density Residential Zone		65	55
All Other Zones	Abutting a Lot in the RM Medium Density Residential Zone	65	55
	Not Abutting a Lot in the RM Medium Density Residential Zone	70	60

(c) Noise Generation. Noise generated by uses shall not exceed the maximum permitted noise level as set forth in Table 9-5.1109 at the property lines of the receiving use, except that:

(1) The noise levels set forth in Table 9-5.1109 may be exceeded by no more than five (5) dBA for a cumulate period of no more than fifteen (15) minutes per hou

(2) The noise levels set forth in Table 9-5.1109 may be exceeded by no more than ten (10) dBA for a cumulate period of no more than five (5) minutes per hour.

(3) The noise levels set forth in Table 9-5.1109 may be exceeded by no more than fifteen (15) dBA for a cumulate period of no more than one (1) minute per hour

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1110 Odor.

All uses shall be so operated as not to permit matter causing offensive odors which are perceptible to the average person at or beyond any lot line of the lot containing s uses. Adequate buffer distances shall be provided between offensive odor sources and sensitive receptors including schools, hospitals, and community centers. Cooking odors and smoke shall be controlled and prevented from becoming a nuisance to neighboring properties. An odor detected no more than fifteen (15) minutes in any one day is acceptable.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1111 Vibration.

There shall be no activity on any site that causes ground vibration that is perceptible without instruments at the property line of the site. This shall not apply to operations involved in the demolition of structures or caused by motor vehicles or trains.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 12. Preservation of Structures

9-5.1201 Purpose.

This article establishes regulations for the preservation of significant and residential structures. The purpose of these regulations is to encourage the preservation and re of such structures. Significant structures reflect the City's heritage, contribute positively to the City's aesthetic character, and provide opportunities for reinvestment. The City's existing housing stock is an important community resource on which the supply and affordability of shelter and maintenance of the community's character depend.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1202 Applicability.

This article applies to any project that involves the demolition of a significant or residential structure, the substantial alteration of the exterior appearance of a significant structure, or a change in the number of dwelling units and/or Live/Work Units in a residential structure.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1203 Conditional Use Permit Required.

(a) Preservation and Reuse. Preservation and reuse of a significant or residential structure shall require approval of a minor conditional use permit pursuant to Article Chapter 7 and the additional findings specified in Section 9-5.1206(a). This shall be in addition to whatever planning permits are otherwise required for the proposed pro (e.g., conditional use permit, design review), which shall be processed concurrently with the conditional use permit for preservation and reuse. Development bonuses ar available for the preservation and reuse of significant structures pursuant to Section 9-4.204.

(b) Demolition. Demolition of a significant or residential structure shall require approval of a conditional use permit by the City Council, upon a recommendation of the Planning Commission, pursuant to Article 5 of Chapter 7 and the additional findings specified in Section 9-5.1206(b). This shall be in addition to whatever planning permi are otherwise required for the proposed project (e.g., conditional use permit, design review, planned unit development), which shall also require City Council approval ar

shall be processed concurrently with the conditional use permit for demolition.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1204 Application.

In addition to the documents required for a conditional use permit application pursuant to Article 5 of Chapter 7, an application for a conditional use permit for the preservation and reuse or the demolition of a significant or residential structure shall be accompanied by the following documents:

(a) Existing Structure. A location map, the address and Assessor's parcel number of the property, a plan showing the footprint of the structure, and photographs of all s of the structure.

(b) Justification. A letter stating why the preservation and reuse or the demolition is needed and how the findings set forth in Section 9-5.1206 could be made.

(c) Proposed Structure. A description of the proposed preservation and reuse of the existing structure or of any proposed replacement structure, a description of propo uses, plans, elevations and color and materials board.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1205 Approval Procedure for Demolition.

(a) Planning Commission Recommendation. After holding a public hearing, noticed as required by Chapter 7, the Planning Commission shall recommend a course of a on the application for a conditional use permit to demolish a significant or residential structure and on any application for a replacement project, including any required approvals such as design review, use permit, variance, rezoning and/or planned unit development. At the conclusion of the public hearing, the Planning Commission, aft making the required findings, shall recommend approval, conditional approval, or denial of the conditional use permit for demolition and any replacement project. The Planning Commission shall forward to the City Council the application, the appropriate environmental documents and the Commission's written report recommending approval, conditional approval, or denial of the conditional use permit for demolition and any replacement project.

(b) City Council Action. The City Council shall take final action on the application for a conditional use permit to demolish a significant or residential structure and on an application for a replacement project, including any required approvals such as design review, use permit, variance, rezoning and/or planned unit development. Within th (30) days following receipt by the City Clerk of the reports forwarded by the Planning Commission, a public hearing, noticed as required by Chapter 7, shall be held by th City Council for action on the conditional use permit for demolition and required approvals for any replacement project. At the conclusion of the public hearing, the City Council, after making the required findings, shall approve, conditionally approve, or deny the conditional use permit for demolition and any replacement project.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1206 Findings.

(a) Preservation and Reuse. To approve a proposal for the preservation or reuse of a significant or residential structure, one (1) of the following findings must be made applicable:

(1) Significant Structure. That the proposed project will retain and enhance all or most of the features of the structure that make it significant.

(2) Residential Structure. That the applicant will retain and incorporate the existing residential units or will provide at least the same number of residential units as existing structure, either on site or elsewhere within the City of Emeryville.

(b) Demolition. The City Council may authorize demolition of a significant or residential structure only if one (1) or more of the following occurs:

(1) Replacement of Significant Structure. The City Council approves a replacement structure based on all of the following findings:

a. The elimination of the significant structure would not be materially detrimental to the public interest of the affected neighborhood of the City; and

b. The replacement structure would feature design quality that is as high as or higher than the structure to be demolished and that it is compatible with the character of the neighborhood; and

c. The replacement structure will promote a pedestrian orientation of the neighborhood in which it is located; and

d. The proposed use would be unable to occupy the existing structure, or would be cost prohibitive as an adaptive reuse of the existing structure due to requi seismic retrofit or other factors.

(2) Replacement of Residential Structure. The City Council approves a replacement structure based on all of the following findings:

a. The applicant will provide at least the same number of dwelling units as the demolished structure, either on site or elsewhere within the City of Emeryville; a

b. The replacement structure would feature design quality that is as high as or higher than the structure to be demolished and that it is compatible with the character of the neighborhood; and

c. The elimination of the residential structure would not be materially detrimental to the housing needs or the public interest of the affected neighborhood or th City.

(3) Significant or Residential Structure, Whether or Not a Replacement Structure is Proposed. The City Council makes one (1) or more of the following findings:

a. The structure is irrecoverably damaged due to natural disaster; or

b. The structure or lot is irrecoverably contaminated with one (1) or more toxins, such that the appropriate regulatory agency requires demolition or partial demolition of the structure before soil remediation or renovation and reuse of the structure can occur; or

c. The structure will be replaced by publicly accessible landscaped open space; or

d. Demolition of the structure is in the best interest of the public health, welfare, or safety.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1207 Conditions of Approval.

The City Council may apply such conditions in connection with approval of the demolition of a significant or residential structure as it deems necessary in order to fulfill th purposes of this article, and may require reasonable guarantees and evidence that such conditions are being, or will be, complied with. Such conditions shall be impleme

prior to the Building Official's issuance of a building permit for the demolition of the structure, and may include but are not limited to the following:

(a) A good faith effort to relocate the structure to an appropriate site within the City of Emeryville.

(b) Documentation of the existing structure to Historic American Buildings Survey standards or to standards established by the Director.

(c) Preserving any significant elements of the structure and/or the structure's facade, and reusing them in any replacement structure.

(d) Salvaging of fixtures and architectural features from the existing building and reusing them in any replacement structure or elsewhere within the City of Emeryville.

(e) Use of building materials in any proposed replacement structure similar to the original structure or those in the immediate area.

(f) Design modifications to any proposed replacement structure to better fulfill the purposes of this article.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1208 Appeals.
A decision on a conditional use permit for the preservation and reuse of a significant or residential structure pursuant to Section 9-5.1203(a) may be appealed as provid Article 14 of Chapter 7.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1209 Effect on Building Permits.
(a) Replacement Structure. If the City Council approves a replacement structure based upon the findings specified in Section 9-5.1206(b)(1) or (2), and except as spe in subsection (b) of this section, the Building Official shall not issue a building permit to demolish a significant or residential structure unless:

(1) The Building Official is in a position to concurrently issue a building permit for the replacement structure to be constructed on the site of the structure to be demolished; and

(2) The Building Official has been provided a fully executed copy of a contract for the construction of the replacement structure.

(b) Contaminated Site. If the City Council approves a replacement structure based upon the findings specified in Section 9-5.1206(b)(1) or (2), and the site of the replacement structure requires remediation of contaminated soil and/or groundwater, the Building Official may issue a building permit to demolish a significant or residen structure upon submittal of an application for a building permit for the replacement structure, including payment of all required plan review fees.

(c) Other Circumstances. If the City Council makes any of the findings contained in Section 9-5.1206(b)(3), the Building Official may issue a building permit to demolish significant or residential structure upon the effective date of the City Council's action.

(d) Accessory Buildings. "Accessory buildings," as defined in Chapter 8, shall be excluded from the provisions of this section.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1210 Designation of Significant Structures.
(a) Park Avenue District. The structures in the Park Avenue District indicated as "Tier 1, High architectural significance" and "Tier 2, Moderate architectural significance Figure 9-5.1210 are hereby designated as significant structures.

(b) Outside Park Avenue District. All structures located outside the Park Avenue District that meet the definition of "significant structure" in Section 9-5.1211(a) are her designated as significant structures.

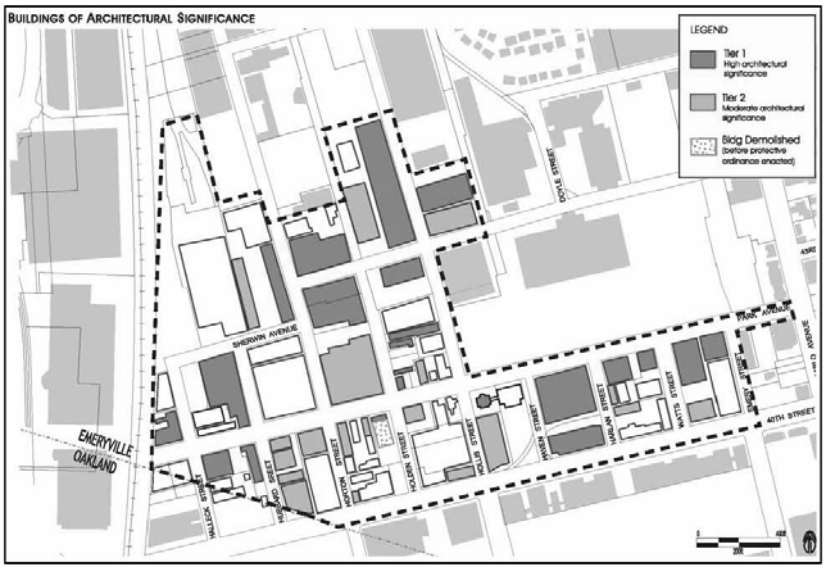


Figure 9-5.1210: Significant Structures in the Park Avenue District

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1211 Definitions.
As used in this article:

(a) "Significant structure" means a structure that is at least fifty (50) years old and meets one (1) of the following criteria:

(1) A prominent structure that is emblematic of Emeryville and important to the history of Emeryville; or

(2) A structure that has at least five (5) of the following features in its street facade(s):

a. Predominantly brick, excepting windows and doors.

b. Windows and doors, including roll-up doors, covering at least thirty percent (30%) of a street facade and covering at least thirty percent (30%) of the grour floor street facade.

c. Symmetry or repetitive rhythm as defined by window and door openings on most of a street facade.

d. Multi-paned windows (at least half of the area of the windows having panes measuring no more than one and one-half feet (1-1/2') by three feet (3')).

e. Window sills protruding from walls at least two inches (2").

f. Roofline with varied heights or angled or curved shapes at street front.

g. Decorative bas relief, concrete inlays, ironwork, stained glass, tiles or other decorative features.

h. Walls with columns or curves.

i. Walls with complex cornices six inches (6") wide or wider.

j. Varied artistic patterns in the predominant cladding material.

k. Arch or angle over the major entrance.

(b) "Demolish" means to remove or destroy all or part of any structure to an extent of more than seventy-five percent (75%) of the replacement cost of the structure, nc including the foundation, immediately prior to destruction, or to remove or destroy features of a significant structure such that it would no longer qualify as a significant structure.

(c) "Preserve and reuse" means retention of all or part of any structure, involving demolition to an extent of no more than seventy-five percent (75%) of its replacement cost, not including the foundation, immediately prior to commencing work on the structure, and to renovate the structure for a subsequent use that is the same as or diffe than its previous use.

(d) "Residential structure" means a structure that is used for any use classified as a Residential use type at Section 9-2.203, 9-2.205, 9-2.207, 9-2.211 or 9-2.213, or defined as a "Live/Work Unit" at Section 9-2.331. A vacant structure shall be considered a residential structure if its most recent use was any such Residential or live/wor use type.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 13. Private Property Access from City Parks, Greenways, and Other City Property

9-5.1301 Purpose.
This article establishes regulations for accessing private property from City parks, greenways, and other City property. Such access can help to enliven parks and green and may provide the only feasible means of access in some situations.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1302 Applicability.
The provisions of this article shall apply whenever a private property owner seeks to gain access to the private property from a City park, greenway, or other City-owned property. Such access may include the entire property or individual dwelling units, Live/Work Units, commercial tenant spaces, or other individual units of the property. Nothing in this article shall restrict access to private property from any public right-of-way, which shall be subject to all other applicable laws and regulations.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1303 Conditional Use Permit Required.
No private property shall be accessed from a City park, greenway, or other City property by pedestrians, bicycles, motor vehicles, or any other means except upon the granting of a minor conditional use permit pursuant to the requirements of this article. Such a conditional use permit approves access from the City park, greenway, or ot City property and includes approval of any and all access improvements on the private property, but does not constitute an entitlement for use of the City park, greenwa other City property in perpetuity.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1304 Allowable Uses.
Except for Eating and Drinking Establishments, no use of special concern, as listed in Section 9-2.701, shall gain access from a City park, greenway, or other City proper unless it is the only feasible means of access.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1305 Alternate Access.
To the extent feasible, a second means of access to the private property shall be provided so that access from a City park, greenway, or other City property is not the so means of access to the private property or any of its individual spaces or units. If access from a City park, greenway, or other City property is the only feasible means of access to the private property, the owner of the private property shall be responsible, in cooperation with the City, for facilitating access to the private property in the eve that the City needs to close or restrict access to the park, greenway, or other City property for maintenance, repairs, or other reasons. The owner of the private property bear all costs associated with facilitating such access during closure or restriction of the park, greenway, or other City property.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1306 Limitations.
Access to private property from a City park, greenway, or other City property shall be limited to pedestrian and bicycle access, unless it provides the only feasible means access for motor vehicles.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1307 Landscaping and Maintenance of Property Gaining Access.
Private property gaining access from a City park, greenway, or other City property shall be attractively landscaped in conformance with all requirements of this Code, the Emeryville Design Guidelines, and all other applicable design guidelines such as the North Hollis Urban Design Plan or the Park Avenue District Plan. Such landscaping be maintained in a healthy growing condition at all times, and the overall property shall be maintained free of trash, litter, graffiti, weeds, peeling paint, and any other blig conditions, in conformance with the requirements of Chapters 2 and 11 of Title 6 and all other applicable laws and regulations.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1308 Access Facilities.
The private property owner shall be responsible for providing a suitable all weather pedestrian and/or bicycle path from the pedestrian and/or bicycle path on the City property to the pedestrian and/or bicycle access point on the private property. If motor vehicle access is to be provided, a driveway conforming to the requirements of Ar 4 of Chapter 4 shall be provided. The private property owner shall be responsible for bearing all costs of design, construction, operation and ongoing maintenance of su access facilities both on the City property and on the private property. If a door into a building is provided on the private property, it shall not swing over the property line the City property; if necessary to prevent this, the door shall be inset into the wall of the private building.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1309 Financial Contribution to Citywide Parks Fund.
As a condition of gaining access from a City park, greenway, or other City property, the owner of the private property shall make a one (1) time lump sum contribution to Citywide Parks Fund in an amount equal to the value of the access as determined by an appraisal prepared at the applicant's expense under the direction of the City. Th shall be in addition to the application fee and any other fees prescribed by the Master Fee Schedule. This condition may be waived, or the amount of the contribution reduced, if the property owner is required to construct or make improvements to the park, greenway, or City property, other than the proposed access facilities, or if the Council determines that the benefit of the access to the City outweighs the benefit of the access to the applicant.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1310 Application.
An application for access to private property from a City park, greenway, or other City property shall be submitted to the Planning and Building Department on a form provided by the Director, accompanied by the fee as set forth in the Master Fee Schedule and application materials as determined necessary by the Director, including b not limited to the following:

(a) A site plan, dimensioned, clearly labeled, and drawn to a standard architectural or engineering scale, showing the entire area where the private property interfaces the park, greenway, or other City property, including other properties and public rights-of-way within ten feet (10') in all directions. The site plan shall clearly indicate:

(1) The location of any and all features on the private property and in the park, greenway, or other City property, including but not limited to pedestrian and bicycl paths, trees, tree wells and grates, lights, signs, utility poles, trash containers, kiosks, planters, benches, play equipment, driveways, parking and loading areas, buildings, doorways, and disabled access ramps.

(2) The proposed access pathways and/or driveways from the park, greenway, or other City property onto the private property, indicating dimensions and materia

(3) The relationship of the proposed access pathways and/or driveways to other adjacent properties and public rights-of-way, including any doors and windows.

(4) The pedestrian, bicycle, and/or motor vehicle circulation routes and disabled access paths of travel if applicable.

(b) A landscape and grading plan clearly indicating and identifying by species all proposed new trees, shrubs, ground cover, and other plant material, and all trees, shr ground cover, and other plant material proposed to be removed.

(c) Color photographs showing the existing conditions of all areas of the park, greenway, or other City property and the private property affected by the proposed acce

(d) A statement in a form acceptable to the City Attorney that the permittee shall defend, indemnify, and hold harmless the City of Emeryville, its agents, officers, and employees from any claim, action, or proceeding (including legal costs and attorney's fees) against the City of Emeryville, its agents, officers or employees from any loss, liability, damage, or cost sustained by any person or property, arising from the operation, use, or maintenance of the proposed access facilities as provided by this article

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1311 Findings.
To grant a conditional use permit for access to private property from a City park, greenway, or other City property, the following findings must be made in addition to the findings required by Article 5 of Chapter 7:

(a) The location, size, and design of the proposed access facilities will be compatible with and will not adversely affect or be materially detrimental to operation and maintenance of the park, greenway, or other City property through which access is to be gained.

(b) The proposed access facilities conform to the applicable provisions of the Emeryville Design Guidelines, including but not limited to the Area Specific Guidelines pertaining to the area in which the proposed access facilities are to be located, and to all other applicable design guidelines such as the North Hollis Urban Design Plan the Park Avenue District Plan.

(c) The proposed access facilities comply with all applicable standards and requirements of this title, the Emeryville Municipal Code, and local, State, and Federal regulations.

(d) The proposed access facilities conform with the requirements of all applicable City departments, including but not limited to Planning and Building, Public Works, Fir and Police.

(e) If motor vehicle access is proposed, there is no other feasible way to provide motor vehicle access to the private property.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1312 Conditions of Approval.
In approving a conditional use permit for access to private property from a City park, greenway, or other City property, such conditions may be designated as deemed necessary to protect the public health, safety and welfare, and reasonable guarantees and evidence may be required that such conditions are being, or will be, compliec with. Such conditions may include, but are not limited to, the following:

(a) Recording of an access easement with the Alameda County Recorder.

(b) Providing for the ongoing maintenance and repair of the access facilities and landscaping constructed on the City's property, and their future replacement if necess

(c) Restricting access to certain hours for pedestrians, bicycles, and/or motor vehicles, or allowing access during hours when City parks and greenways are otherwise closed to the public.

(d) Restricting the uses that may gain access from the City park, greenway, or other City property.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 14. Secondary Residential Units

9-5.1401 Purpose.
This article establishes regulations for Secondary Residential Units. Secondary Residential Units provide a valuable housing resource and help to achieve the goals, objectives, and policies of the Housing Element of the General Plan to promote a range of affordability levels. The purpose of these regulations is to encourage the establishment of Secondary Residential Units as accessory uses in conjunction with principal Single Unit residential uses, and to provide for their ministerial approval in conformance with State law.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1402 Applicability.
The provisions of this article apply to any proposal to establish a Secondary Residential Unit, as defined in Section 9-2.702(b), as an accessory use in conjunction with a principal Single Unit residential use.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1403 Approval Procedure.
A proposal for a Secondary Residential Unit shall be reviewed by the Director, in consultation with the Chief Building Official and Fire Marshal, for conformance with the provisions of this article pursuant to the zoning compliance review procedures in Article 3 of Chapter 7. If the Director determines that the proposal conforms to the requirements of this article, a zoning compliance approval shall be issued. If the Director determines that the proposal does not conform to the requirements of this articl zoning compliance approval shall not be issued, and the applicant shall be advised as to how the proposal could be brought into compliance. The Director's determinatio compliance or noncompliance may be appealed to the Planning Commission pursuant to Article 14 of Chapter 7.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1404 Where Allowed.
(a) Districts. Secondary Residential Units are permitted only in the residential zones, and in the MUR Mixed Use with Residential and MURS Mixed Use with Residentia South zones.

(b) Other Uses. Secondary Residential Units are permitted only on lots containing a legal, conforming Single Unit residential use and no other principal use. (A Single U residential use outside the RM Medium Density Residential zone may be deemed conforming pursuant to Section 9-5.1003(b).) A Secondary Residential Unit may be established in conjunction with the establishment of a new principal Single Unit residential use; provided, that no other principal use exists, or will exist, on the same lot.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1405 Building Intensity and Residential Density.
Secondary Residential Units are exempt from the building intensity (floor area ratio or FAR) and residential density regulations in Article 2 of Chapter 4.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1406 Size of Unit.
(a) Floor Area. A Secondary Residential Unit may not have a greater floor area than the principal Single Unit with which it is associated. In addition, the floor area of th Secondary Residential Unit shall be limited as follows:

(1) If the principal Single Unit is less than one thousand (1,000) square feet, the Secondary Residential Unit shall not exceed five hundred (500) square feet.

(2) If the principal Single Unit is at least one thousand (1,000) square feet but less than one thousand eight hundred (1,800) square feet, the Secondary Resident Unit shall not exceed fifty percent (50%) of the floor area of the principal Single Unit.

(3) If the principal Single Unit is one thousand eight hundred (1,800) square feet or more, the Secondary Residential Unit shall not exceed nine hundred (900) sq feet.

(b) Bedrooms. The Secondary Residential Unit may not have more bedrooms than the principal Single Unit with which it is associated.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1407 Parking.
A Secondary Residential Unit may only be established if off-street parking is provided for the principal Single Unit as required by Article 4 of Chapter 4. Parking shall be provided for the Secondary Residential Unit as follows:

(a) If the Secondary Residential Unit contains no bedrooms or one (1) bedroom, no parking spaces are required.

(b) If the Secondary Residential Unit contains two (2) or more bedrooms, one (1) parking space is required.

Parking for the Secondary Residential Unit shall comply with the design standards for parking lots and structures in Section 9-4.406, except that parking spaces for the principal Single Unit and Secondary Residential Unit may be in tandem.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1408 Dimensional Requirements.
(a) Lot. The lot on which a Secondary Residential Unit is to be located must comply with the minimum lot size and width requirements of Section 9-4.701.

(b) Setback. A Secondary Residential Unit shall be subject to the same setback requirements as the principal Single Unit, as set forth in Section 9-4.301, except that th minimum rear setback shall be five feet (5').

(c) Height. The maximum height limit of a Secondary Residential Unit shall be thirty feet (30'), except that it shall step down at an angle from a maximum height of thirty (30') at fifteen feet (15') from the rear lot line to a maximum height of fifteen feet (15') at five feet (5') from the rear lot line.

(d) Separation. A Secondary Residential Unit may be either attached to or detached from the principal Single Unit with which it is associated. If detached, the Seconda Residential Unit shall be separated from the principal Single Unit by no less than six feet (6').

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1409 Design.

Any proposal for a Secondary Residential Unit shall be subject to the applicable provisions of the Emeryville Design Guidelines, including but not limited to those pertaini the area of the City in which the proposed Secondary Residential Unit is to be located, and to any other applicable design guidelines. A Secondary Residential Unit shall compatible with the principal Single Unit with which it is associated in terms of form, materials, style, and other relevant design factors. No formal design review approval be required, but the design shall be evaluated as part of the zoning compliance review for conformance to the requirements of this section.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1410 Other Requirements.

(a) Owner Occupancy Required. The owner of the property must occupy either the principal Single Unit or the Secondary Residential Unit.

(b) One (1) Secondary Residential Unit per Lot. No more than one (1) Secondary Residential Unit is permitted on a lot.

(c) Units May Not Be Sold Separately. A Secondary Residential Unit and its associated principal Single Unit may not be sold separately either by conversion to condominiums, division of the lot on which they are located, or by other means.

(d) Sewer Lateral. A proposal to establish a Secondary Residential Unit shall comply with the provisions of Chapter 8 of Title 7 concerning sewer laterals, including replacement or upgrading of the sewer lateral if required.

(e) Other Code Requirements. A Secondary Dwelling Unit shall comply with all other applicable provisions of the Emeryville Municipal Code and State and Federal law, including, but not limited to, building and fire code requirements.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 15. Sidewalk Cafes

9-5.1501 Purpose.

This article establishes the sidewalk cafe regulations. The purpose of these provisions is:

(a) To encourage and promote the establishment of sidewalk cafes as visual amenities which in turn intensify pedestrian activity and make the street life more attractive while protecting the public health, safety, and general welfare;

(b) To ensure that all persons, including those with disabilities, may reasonably use the public streets, sidewalks, rights-of-way, and other public property without interference or hazard;

(c) To avoid obstruction of views of traffic signs and pedestrians;

(d) To ensure that damage to sidewalks is minimized and repaired;

(e) To maintain the good appearance of public streets, sidewalks, and adjacent private property;

(f) To allow the healthy growth of street trees and other landscaping;

(g) To maintain access by emergency vehicles and personnel; and

(h) To protect ingress and egress to properties adjoining the public right-of-way.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1502 Permit Required.

No person shall establish, operate, or maintain a sidewalk cafe without first obtaining a valid sidewalk cafe permit pursuant to this article.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1503 Where Permitted.

Sidewalk cafes shall be permitted in any zoning district in which Restaurants are permitted or conditionally permitted. Parklets shall be permitted in any zoning district.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1504 Standards.

All sidewalk cafes shall conform to the following standards:

(a) The sidewalk cafe shall adjoin and be operated in conjunction with a Restaurant licensed to sell food and beverages for consumption on the premises.

(b) The permittee shall at all times comply with all Federal, State, and local laws regarding the operation of the sidewalk cafe and the associated Restaurant.

(c) The sidewalk cafe permit shall be posted in plain view within the Restaurant for which the permit has been issued.

(d) The hours of operation of the sidewalk cafe shall not exceed the hours of operation of the associated Restaurant.

(e) There shall be no food preparation or storage in the sidewalk cafe area.

(f) All furniture and equipment associated with the sidewalk cafe shall be confined at all times to the sidewalk cafe area as shown on the approved site plan, and shall b

removed from the sidewalk cafe area at the end of each business day, except for semi-permanent barriers such as railings, fences, or planters, which are not required to removed.

(g) At least four feet (4') of clear sidewalk width, or a greater width if deemed appropriate by the City, shall be maintained adjacent to the sidewalk cafe at all times. Such clear sidewalk width shall be free of any and all obstructions, including but not limited to street trees, tree wells and grates, street lights, signs, utility poles, fire hydrants, trash containers, kiosks, planters, benches, and news racks, and shall comply with any and all requirements for disabled access.

(h) The sidewalk cafe shall be maintained in a clean, sanitary, and attractive condition at all times, free of dirt, grease, trash, and litter. Tables shall be bussed regularly disposable plates, cups, and utensils are used, a trash container shall be provided for the use of patrons. A final cleanup shall be conducted at the end of each business day, including litter removal from the sidewalk cafe area, adjacent sidewalk, and roadway gutter within one hundred feet (100') in each direction on the same side of the street. The sidewalk cafe area and adjacent sidewalk shall be swept clean at least daily, and shall be steam cleaned annually if required by the Public Works Director.

(i) Amplified sound shall be prohibited in the sidewalk cafe.

(j) Smoking shall be prohibited in the sidewalk cafe and within twenty-five feet (25') of all entrances, windows, and vents of the associated Restaurant.

(k) No changes to the layout, design, or operation of the sidewalk cafe shall be allowed without prior approval of the Planning Director.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-001, eff. Mar. 6, 2014)

9-5.1505 Alcoholic Beverages.

Alcoholic beverages may be served and consumed in a sidewalk cafe; provided, that:

(a) A valid license from the California Department of Alcoholic Beverage Control has been obtained and all requirements imposed by said Department have been met.

(b) The permittee shall at all times comply with all Federal, State, and local laws regarding the sale, service, and consumption of alcohol.

(c) The sidewalk cafe shall be separated from the adjacent sidewalk by a substantial physical barrier, such as a railing, fence, or planter, that is at least thirty inches (3 high and with openings no more than four feet (4') wide.

(d) Alcoholic beverages shall be consumed only within the sidewalk cafe area and associated Restaurant. The permittee shall not allow patrons to leave the confines o sidewalk cafe with any alcoholic beverage and shall not allow patrons to give or sell alcoholic beverages to any person outside the sidewalk cafe.

(e) The sidewalk cafe shall maintain full food service and shall operate as a bona fide eating place at all times that it is in operation. No sidewalk cafe may function as a tavern, or cocktail lounge, and no sidewalk cafe shall be associated with a Bar/Nightclub/Lounge, as defined in Section 9-2.319(a).

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1506 Application.

Application for a sidewalk cafe permit shall be submitted to the Planning and Building Department on a form provided by the Director, accompanied by the fee as set forth the Master Fee Schedule and application materials as determined necessary by the Director, including but not limited to the following:

(a) A site plan, dimensioned, clearly labeled, and drawn to a standard architectural or engineering scale, showing the entire area between the curb and the building containing the Restaurant, and adjacent properties, sidewalk areas, and public right-of-way within ten feet (10') in all directions. The site plan shall clearly indicate:

(1) The proposed sidewalk cafe area, including its length, width, and square footage, and the adjacent sidewalk including the curb;

(2) The number and arrangement of tables and chairs, and any other proposed features including but not limited to umbrellas, heaters, trash containers, railings, planters and fencing;

(3) The relationship of the proposed sidewalk cafe to the Restaurant and adjacent businesses, including doors and windows;

(4) The location of any and all other features in the public right-of-way, including but not limited to street trees, tree wells and grates, street lights, signs, utility pole fire hydrants, trash containers, kiosks, planters, benches, news racks, driveways, disabled access ramps, crosswalks, bus stops and shelters, loading zones, and o street parking spaces, and indicating the clear sidewalk width required by Section 9-5.1504(g);

(5) The pedestrian circulation and disabled access path of travel through the proposed sidewalk cafe between the public sidewalk and the Restaurant.

(b) Specifications for the design of all tables and chairs, and any other proposed features including but not limited to umbrellas, heaters, trash containers, railings, plan and fencing. Such specifications shall provide sufficient information for the Director to be able to ascertain the color, material, design, and general quality of these feature and may include actual color and material samples, manufacturer's specification sheets, color photographs, catalog entries, or other information as deemed appropriate the Director.

(c) Color photographs of the Restaurant, sidewalk area, and adjacent businesses and public right-of-way sufficient to illustrate conditions prior to establishment of the sidewalk cafe.

(d) Proof of comprehensive liability insurance covering the sidewalk cafe area and the adjacent property on which the Restaurant is located in an amount of not less th one million dollars ($1,000,000.00) as a combined single limit for personal injury (including death) and property damage; an endorsement naming the City of Emeryville a additional insured; a copy of the declarations or information page(s) for the policy; and a statement by the insurance carrier that thirty (30) days' notice will be given to th City before any cancellation. The policy of liability insurance shall be kept in force during such time as the sidewalk cafe is maintained under the terms of this article.

(e) A statement in a form acceptable to the City Attorney that the permittee shall defend, indemnify, and hold harmless the City of Emeryville, its agents, officers, and employees from any claim, action, or proceeding (including legal costs and attorney's fees) against the City of Emeryville, its agents, officers or employees from any loss, liability, damage, or cost sustained by any person or property, arising from the operation, use, or maintenance of the sidewalk cafe as provided by this article.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1507 Approval Procedure.

Applications for sidewalk cafe permits shall be considered by the Planning and Building Director, in consultation with the Public Works Director, Chief Building Official, Fir Marshal, and Police Chief. The Director, at his/her discretion, may give such notice as is deemed appropriate to adjacent property owners or other interested parties. However, the Director may, instead, refer any application to the Planning Commission for consideration. If considered by the Commission, the application shall be heard

public hearing noticed by types C, D, and E and optionally by types A and F, as these notice types are defined in Section 9-7.208(b). The Director or Commission, as the case may be, may approve or disapprove an application or require changes or conditions of approval which, in his/her/its judgment, are necessary to ensure conformity the provisions of this article. The Director's decision may be appealed to the Planning Commission pursuant to Article 14 of Chapter 7. If the Director refers the applicatio the Planning Commission for consideration, the Commission's decision may be appealed to the City Council pursuant to Article 14 of Chapter 7.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1508 Required Findings.

In order to approve a sidewalk cafe permit, all of the following findings shall be made:

(a) The location, size, design and operating characteristics of the proposed sidewalk cafe will be compatible with and will not adversely affect or be materially detrimen neighborhood character, with consideration given to the convenience and safety of pedestrians, property owners, occupants, customers, residents, and tenants of office stores, shops, and dwellings in the vicinity; harmony in design with nearby uses, buildings and structures; and the capacity and physical character of surrounding streets sidewalks.

(b) The proposed sidewalk cafe conforms to the standards in Section 9-5.1504.

(c) If alcoholic beverages are to be served, the proposed sidewalk cafe conforms to the provisions of Section 9-5.1505.

(d) The proposed sidewalk cafe conforms to the applicable provisions of the Emeryville Design Guidelines, including but not limited to the General Guidelines pertainin sidewalks and landscaping, and the Area Specific Guidelines pertaining to the area in which the proposed sidewalk cafe is to be located; and to all other design guidelin applicable to the area in which the proposed sidewalk cafe is to be located.

(e) The proposed sidewalk cafe is consistent with the General Plan.

(f) The proposed sidewalk cafe complies with all applicable standards and requirements of this title, the Emeryville Municipal Code, and local, State, and Federal regulations.

(g) The proposed sidewalk cafe conforms with the requirements of all applicable City departments, including but not limited to Planning and Building, Public Works, Fire and Police.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1509 Renewal.

A sidewalk cafe permit shall expire on December 31 of the calendar year in which it was issued or renewed. A valid permit which has not been surrendered, suspended revoked may be renewed for respective periods of not longer than one (1) year upon the following terms and conditions:

(a) All annual sidewalk cafe permits issued under this article, except the first permit issued for a newly established sidewalk cafe, shall be considered to be issued on January 1 of each year and shall expire on December 31 of the same year.

(b) The annual renewal application for an existing sidewalk cafe is hereby declared delinquent if not filed on or before March 1 of each year.

(c) The City is not required to send a renewal, delinquency or other notice to any person subject to the provisions of this article.

(d) Every person subject to a sidewalk cafe permit shall, before the renewal application becomes delinquent, file with the Director a renewal application except as prov in subsection (h) of this section.

(e) Application for renewal of a sidewalk cafe permit shall be submitted to the Planning and Building Department on a form provided by the Director, accompanied by a statement indicating whether any information required by Section 9-5.1506 has changed; and proof of comprehensive liability insurance, as detailed in Section 9-5.1506 for the renewal period.

(f) The Director shall review the renewal application in consultation with the Public Works Director, Chief Building Official, Fire Marshal, and Police Chief, to ensure the sidewalk cafe's continued compliance with the provisions of this article and any conditions of approval, and to assess any outstanding violations or complaints. The Direc may request additional information in order to complete his/her review.

(g) Upon completion of the review, the Director shall make a determination whether to renew the application, and shall promptly inform the permittee of his/her decisior the permit is renewed, the Planning Director shall provide the permittee with a new permit for the renewal period, to be posted in the Restaurant as required by Section 9 5.1504(c). In renewing the sidewalk cafe permit, the Director may modify or delete any existing conditions of approval, and impose any new conditions of approval, as he deems appropriate. If the permit is not renewed, the Director shall provide a written explanation to the permittee detailing the reasons for the nonrenewal. If the permit is renewed, the sidewalk cafe shall be removed, and the sidewalk shall be restored as required by Section 9-5.1512, within thirty (30) days of the Director's decision, unles appealed pursuant to Section 9-5.1511(c).

(h) In the absence of any action by the City or the permittee to renew a sidewalk cafe permit prior to the delinquency date specified in subsection (b) of this section, the permit shall be deemed to be renewed for one (1) year.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1510 Revocation.

A permit issued pursuant to this article shall be subject to suspension, revocation, or modification for the violation of any provisions of this Code or for any grounds which would warrant the denial of the issuance of such original permit. The Director may issue a notice of violation for any failure to comply with any requirement of this article any condition of the permit. Such notice shall set forth the action necessary to come into compliance and a time frame for compliance. If the noncompliance is not abated corrected, or rectified within the time specified by the Director in said notice, the Director may revoke, suspend, or modify the permit, upon thirty (30) days' notice. If the Director decides to revoke or suspend the permit, the sidewalk cafe shall be removed, and the sidewalk shall be restored as required by Section 9-5.1512, within thirty (3 days of the Director's decision unless appealed pursuant to Section 9-5.1511(d).

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1511 Appeals.

(a) A decision of the Director on a new sidewalk cafe permit pursuant to Section 9-5.1507 may be appealed to the Planning Commission as provided in Article 14 of Chapter 7. The decision of the Planning Commission shall be final.

(b) If the Director refers a new sidewalk cafe permit application to the Planning Commission for consideration pursuant to Section 9-5.1507, the decision of the Plannin Commission may be appealed to the City Council as provided in Article 14 of Chapter 7.

(c) A decision of the Director on the renewal of a sidewalk cafe permit pursuant to Section 9-5.1509 may be appealed to the Planning Commission as provided in Articl of Chapter 7. The decision of the Planning Commission shall be final. If the Commission decides not to renew the permit, the sidewalk cafe shall be removed, and the sidewalk shall be restored as required by Section 9-5.1512, within thirty (30) days of the Commission's decision.

(d) A decision of the Director to revoke, suspend, or modify a sidewalk cafe permit pursuant to Section 9-5.1510 may be appealed to the Planning Commission as prov in Article 14 of Chapter 7. The decision of the Planning Commission shall be final. If the Commission decides to revoke or suspend the permit, the sidewalk cafe shall be removed, and the sidewalk shall be restored as required by Section 9-5.1512, within thirty (30) days of the Commission's decision.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1512 Restoration of Sidewalk.
Upon cessation of the operations of a sidewalk cafe, the permittee shall restore the sidewalk to its original condition, including but not limited to the refilling of any holes drilled into the sidewalk. Any damage or alteration to the sidewalk caused by the use of the sidewalk cafe shall be repaired to the satisfaction of the Director of Public Wo by the permittee at the permittee's sole expense.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1513 Amortization.
Any existing sidewalk cafe which does not comply with the provisions of this article shall be removed or otherwise brought into conformance within six (6) months of the effective date of the ordinance codified in this article.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1514 Parklets.
Parklets shall require a sidewalk cafe permit and shall be subject to all of the regulations and procedures set forth in this article for sidewalk cafes except that they are n required to be built and operated in conjunction with a Restaurant. In addition, parklets shall be subject to the following regulations:

(a) A parklet shall require the approval of the City Council, upon the recommendation of the Transportation Committee, prior to the approval of a sidewalk cafe permit. conditions and requirements designated by the City Council in its approval shall become conditions of approval of the sidewalk cafe permit.

(b) A parklet shall be available for use by the general public and shall not be reserved for the exclusive use of an adjacent Restaurant or other use, even if built and operated in conjunction with that Restaurant or other use, nor for the exclusive use of any other private enterprise.

(c) Table service shall not be permitted in a parklet.

(d) Commercial signage and advertising shall not be permitted in a parklet.

(e) Service and consumption of alcoholic beverages shall not be permitted in a parklet.

(f) Design criteria for parklets may be issued administratively by the Director.

(g) A building permit shall not be required for a parklet, but its design and construction shall comply with all applicable building regulations, including but not limited to disabled access, and any design criteria issued by the Director.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1515 Definitions.
As used in this article:

(a) "Parklet" shall mean the temporary use of space in the roadway, adjacent to the curb and typically located in a parking space, unused bus stop, or other vehicular with or without a platform to extend the grade of the sidewalk into the roadway. A parklet may feature tables and chairs for public use, benches, planters and landscapin features, bicycle parking, and other public amenities, and may be built and operated in conjunction with an adjacent street-level Restaurant or other use. A parklet may function as a "bicycle corral" with bicycle racks in the roadway for the on-street parking of bicycles.

(b) "Person" shall mean and include individual, firm, association, partnership, joint venture or corporation (whether for-profit or nonprofit).

(c) "Public right-of-way" shall mean the area dedicated to public use for public street purposes including but not limited to roadways, parkways, alleys and sidewalks.

(d) "Restaurant" shall mean the use type defined in Section 9-2.319(b).

(e) "Roadway" shall mean that portion of a public right-of-way improved, designed and ordinarily used for vehicular traffic and/or parking, including drainage gutters an curbs.

(f) "Sidewalk" shall mean either:

(1) That portion of a public right-of-way provided for the exclusive use of pedestrians, including planting areas or parkways, between the roadway and adjacent property lines; or

(2) Any other publicly accessible pedestrian area owned or controlled by the City of Emeryville including, but not limited to, greenways and parks.

(g) "Sidewalk cafe" shall mean an area of the sidewalk used exclusively for eating, drinking, and related pedestrian circulation and located adjacent to, and operated ir conjunction with, a street-level Restaurant.

(h) "Sidewalk cafe permit" shall mean a permit to establish, operate, and maintain a sidewalk cafe or parklet issued pursuant to this article. A sidewalk cafe permit may be transferred or assigned, does not constitute a deed or grant of an easement by the City, shall be valid for one (1) calendar year, and is revocable at any time.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 16. Signs

9-5.1601 Purpose.
The purpose of this article is to regulate signs as an information system that expresses the character and environment of Emeryville while recognizing the importance of business activity to the City. Specifically, these regulations are intended to:

(a) Encourage communications which aid orientation and promote economic vitality.

(b) Enhance and preserve the aesthetic character of the City.

(c) Apply basic principles of good design and sensitivity to community appearance.

(d) Restrict signs that may create a nuisance to nearby properties, violate privacy, or create hazards or unreasonable distractions for pedestrians or drivers.

(e) Ensure that the constitutionally guaranteed right of free speech is protected.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1602 Applicability.
This article establishes the sign regulations. These regulations shall apply to all signs in the City, except signs on the public sidewalk, which are regulated by Chapter 34 Title 5; signs for certified farmers' markets, which are regulated by Section 5-35.06; and signs adjacent to landscaped freeways, which are regulated by Chapter 12 of Ti Nothing in this article shall be construed to allow any signs for a Home Occupation except as allowed by Article 8 of this chapter.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1603 Procedure.
(a) Review by Director. All sign proposals shall be subject to review by the Director to determine whether they are prohibited, exempt, or require approval of a minor de review permit, major design review permit, or Master Sign Program.

(b) Prohibited Signs. A prohibited sign, as listed in Section 9-5.1604, is not allowed. Any such sign, other than a nonconforming sign pursuant to Section 9-5.1614, is hereby declared to be a public nuisance and shall be removed immediately.

(c) Exempt Signs. An exempt sign, as listed in Section 9-5.1605, does not require design review approval and may be installed without further planning review if the Director determines that it meets all the requirements for an exempt sign. Note, however, that such a sign may still require a building permit pursuant to the building regulations in Title 8.

(d) Individual Establishment Signs. Individual establishment signs that are neither prohibited nor exempt shall require a design review permit from either the Director or Planning Commission and shall be processed pursuant to Section 9-5.1612.

(e) Master Sign Programs. A proposal for a Master Sign Program shall require approval by the Planning Commission pursuant to Section 9-5.1613.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1604 Prohibited Signs.
The following types of signs, materials, designs, messages, and locations are prohibited:

(a) Cabinet Signs. One (1) or two (2) sided internally illuminated signs consisting of a translucent message panel or panels, usually rectangular, mounted on a frame enclosing the illumination fixtures; also known as "panel," "can," or "box" signs.

(b) Electronic Signs. Electronic signs with changeable copy and/or animation; also known as "reader boards." This prohibition does not include small signs oriented to pedestrians and providing public transportation and other noncommercial information.

(c) Mobile Billboards. Any sign carried or conveyed by a vehicle for the primary purpose of advertising excluding signs on taxis and buses.

(d) Outdoor Advertising Signs. Billboards and any other off-premises outdoor advertising signs which convey a commercial message as their primary purpose.

(e) Signs Creating Traffic Hazards.

(1) Signs located in such a manner as to constitute a traffic hazard or obstruct the view of traffic, any unauthorized traffic sign or signal device, or any sign that ma confused with any authorized traffic sign, signal, or device; or that makes use of the words "stop," "look," "danger," or any other word, phrase, symbol, or character interferes with, misleads, or confuses vehicular drivers in their use of roads.

(2) Signs which may pose a traffic hazard due to glaring or varying illumination.

(3) Signs within five feet (5') of a fire hydrant, street sign, or traffic signal if such placement could create a safety hazard.

(f) Signs for Vacated Uses. Signs for activities which have vacated a site or premises for ninety (90) days or more.

(g) Signs on Public Property. Signs on public property unless posted by public personnel in the performance of their duties.

(h) Signs That Produce Noise or Emissions. Signs that produce noise or sounds that can be heard at the lot line and signs that emit visible smoke, vapor, particles, or

(i) Streamers, Pennants or Inflatable Signs. Streamers, pennants, and other signs made of lightweight fabric or similar material, designed to rotate or move with the wir inflatable signs or displays.

(j) Vehicle-Mounted Signs. Vehicle-mounted signs of a commercial nature, except when attached to vehicles being used for bona fide delivery and other vehicular purp away from a fixed place of business.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1605 Exempt Signs.
The following signs or modifications to signs do not require design review, and, except for business signs, the area of such signs shall not be included in the maximum allowable sign area measurement for the purposes of this article. The owner of an exempt sign is responsible for its safe and attractive erection and maintenance, for obtaining a building permit where applicable, and for complying with applicable provisions of this article or any other requirements of this title.

(a) A-Frame Signs. Portable freestanding signs in the shape of the letter "A" as viewed from the side, typically with two (2) sides facing opposite directions. Under this exemption, such signs may only be displayed on private property. No more than one (1) sign is permitted per individual establishment. Such sign may not exceed three f (3') in height with no more than six (6) square feet of sign area on each side. See Chapter 34 of Title 5 for regulations pertaining to the display of such signs on the publi sidewalk.

(b) Address Signs. Address identification signs of no more than two (2) square feet per address.

(c) Apartment and Condominium Identification Signs. Nonilluminated identification signs on apartment and residential condominium buildings of no more than six (6) sq feet per address.

(d) Business Signs. Business establishment identification signs, restricted to one (1) sign not exceeding six (6) square feet in area for each establishment. Such signs s be included in the aggregate sign area as specified in Section 9-5-1609(b)(1).

(e) Business Information Signs. Signs not exceeding six (6) square feet in aggregate area per business establishment containing such information as "open/closed," "c cards accepted" or items such as directories and menus.

(f) Change of Business Signs. A temporary attachment or covering of wood, plastic, or canvas over a permanent sign indicating a change of ownership or activity may displayed for no longer than forty-five (45) days following the change of ownership or activity for which the sign is intended. The sign shall be no larger than the previous permitted permanent sign.

(g) Commemorative Signs. Commemorative plaques, memorial signs or tablets, or signs indicating names of buildings and dates of building erection, either attached to cut into the surfaces of buildings; provided, that no such sign exceeds four (4) square feet in area.

(h) Construction Signs. A temporary construction sign may be erected on a construction site for the duration of construction activities; provided, that it is immediately removed after issuance of a certificate of occupancy for the project, or abandonment of work. A temporary construction sign may not exceed eight (8) square feet in area five feet (5') above finished grade to the top of the sign in the RM Medium Density Residential zone or eighteen (18) square feet in area and six feet (6') above finished g to the top of the sign in other zones.

(i) Decorative Holiday Displays. Noncommercial decorative holiday displays; provided, that such displays are removed within forty-five (45) days of their installation.

(j) Directional Signs. Signs to direct on-site traffic circulation, not exceeding six (6) square feet in area, and with an aggregate area not exceeding one-fifth (1/5) of a square foot per linear foot of site frontage, and publicly installed off-site directional signs to facilitate traffic flow to and from high-volume private facilities.

(k) Flags. Noncommercial flags flown from flagpoles or otherwise displayed. Flagpoles shall be subject to the applicable height limits in Section 9-4.202.

(l) Information Signs. Noncommercial informational signs not exceeding four (4) square feet in area erected for the safety and convenience of the public, such as signs identifying restrooms or telephones, "no parking" and "no trespassing" signs.

(m) Interior Signs. Signs located in interior areas of a building or site that are not intended to be visible from public streets, public open space, or adjacent properties.

(n) Kiosk and Mobile Vendor Signs. Signs fixed to mobile vending carts that identify or advertise the name, product, or service provided by the vendor. Each mobile ver cart is limited to a maximum sign area of eight (8) square feet.

(o) Official Government Signs. Official notices issued by a court, public body or office; official notices posted by a utility or public agency; signs erected by a governmer body to direct or regulate pedestrian or vehicular traffic; public hearing or meeting notices; or other signs required or authorized by law.

(p) Public Service and Civic Identity Signs. Signs erected on public or private property to promote City-sponsored activities or other community events. Signs may inclu district identification banners; temporary signs or banners erected above streets or attached to lamp posts or utility poles; or temporary banners posted to fences at publ schools.

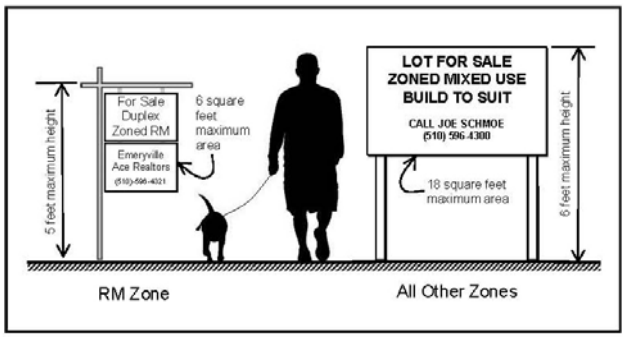


Figure 9-5.1605(q)(1): On-Site Real Estate Signs

(q) Real Estate Signs.

(1) On-Site Real Estate Signs. On-premises signs conveying information about the sale, rental, or lease of the appurtenant lot, premises, dwelling, or structure; provided, that they comply with the following standards:

a. No more than one (1) real estate sign per lot in the RM Medium Density Residential zone, or one (1) real estate sign per public street frontage per lot in oth zones, may be displayed at any one (1) time.

b. The sign or signs shall not exceed an aggregate area of six (6) square feet in the RM Medium Density Residential zone or eighteen (18) square feet in all o zones. See Figure 9-5.1605(q)(1).

c. Wall signs shall not be higher than seven feet (7') above finished grade to the top of the sign in the RM Medium Density Residential zone or fifteen feet (15 all other zones. Ground signs shall not exceed five feet (5') in height to the top of the sign in the RM Medium Density Residential zone or six feet (6') in height in other zones. See Figure 9-5.1605(q)(1).

d. Signs shall not be illuminated.

e. Signs shall not be placed on rooftops or above parapet or eave lines.

f. All signs shall be removed within seven (7) days after the sale, lease, or rental of the property has been completed.

(2) Directional Signs for Open Houses. Off-site signs located on the public sidewalk and directing the public to “open house” events for the viewing of lots, premis dwellings or structures that are for sale, lease, or rent shall be regulated by the applicable provisions of Chapter 34 of Title 5.

(r) Small Noncommercial Signs. Noncommercial signs, each no larger than six (6) square feet in area, attached to a freestanding sign structure, a window, or a buildin wall. All businesses and residences may display up to two (2) such signs, which may include, but are not limited to, freedom of speech signs, political signs, and organiza identification signs. Such signs may be located on the ground floor or upper floors of buildings and shall not be located in the public right-of-way.

(s) Temporary Window Signs. Window signs, subject to the following provisions:

(1) Temporary window signs not exceeding ten percent (10%) of the area of window and transparent door frontage on any ground floor or second floor building facade in nonresidential use are permitted.

(2) Temporary window signs may be displayed for no more than ninety (90) consecutive days with at least ninety (90) consecutive days between display periods.

(3) Temporary window signs shall not be included in the aggregate sign area as specified in Section 9-5-1609(b)(1).

(4) Any interior sign either hung within two feet (2') of a window or attached to a display located within two feet (2') of a window, and which faces outward, is considered a window sign.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1606 General Provisions for All Sign Types.

(a) Calculation of Sign Area. The area of an individual sign shall be calculated as follows:

(1) Single-Faced Signs. Sign area shall include the entire area within a single continuous perimeter composed of squares or rectangles that enclose the extreme l of all sign elements, including, but not limited to, sign structures or borders, written copy, logos, symbols, illustrations, and color. Supporting structures such as sign bases and columns are not included in sign area; provided, that they contain no lettering or graphics except for addresses. The calculation of sign area for various t of single-faced signs is illustrated in Figure 9-5.1606(a)(1).

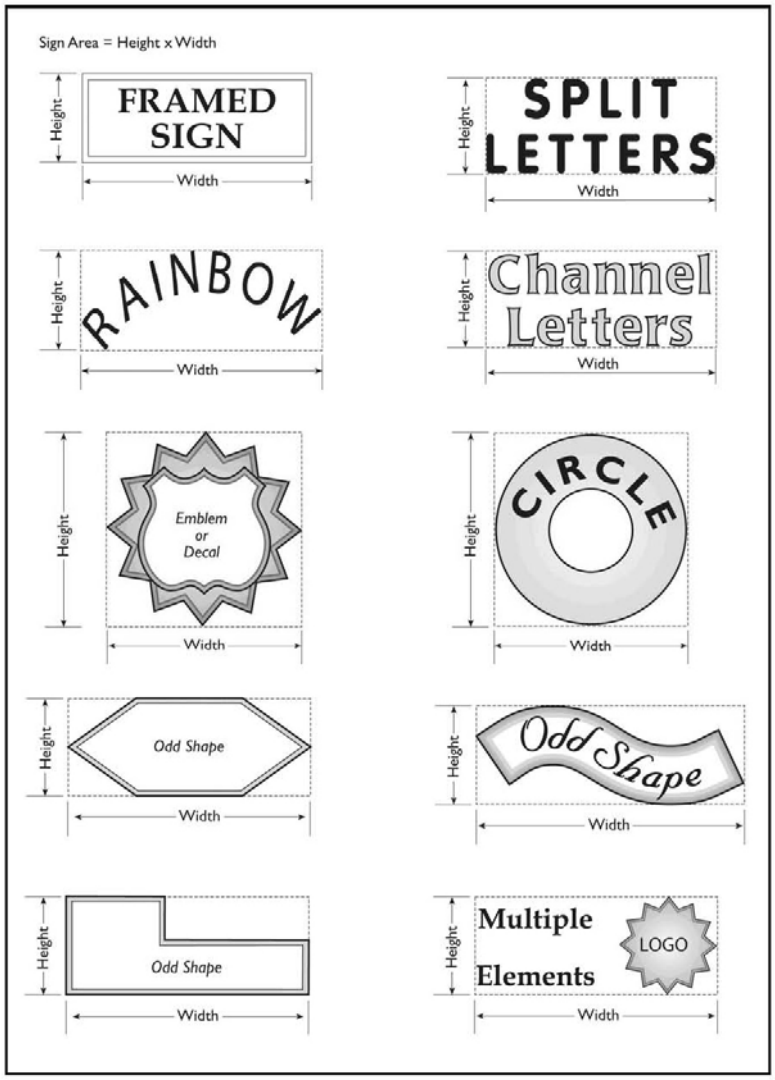


Figure 9-5.1606(a)(1): Area of Single-Faced Signs

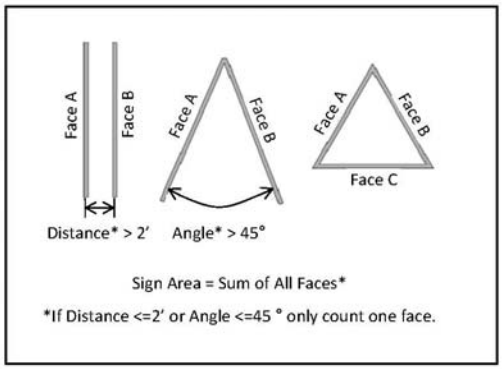


Figure 9-5.1606(a)(2-3): Area of Double-Faced and Multi-Faced Signs

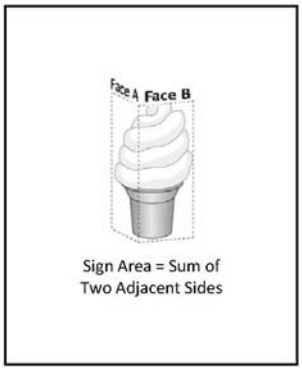


Figure 9-5.1606(a)(4): Area of Three (3) Dimensional Signs

(2) Double-Faced Signs. Where two (2) faces of a double-faced sign are located two feet (2') or less from one another at all points, or located at an interior angle forty-five (45) degrees or less from one another, the sign area shall be computed as the area of one (1) face. Where the two (2) faces are not equal in size, the larg sign face shall be used. Where two (2) faces of a double-faced sign are located more than two feet (2') or forty-five (45) degrees from one another, both sign faces be counted toward sign area. See Figure 9-5.1606(a)(2-3).

(3) Multi-Faced Signs. On a three (3) faced sign, where at least one (1) interior angle is forty-five (45) degrees or less, the area of two (2) faces (the largest and smallest face) shall be summed to determine sign area. In all other situations involving a sign with three (3) or more sides, sign area shall be calculated as the sum faces. See Figure 9-5.1606(a)(2-3).

(4) Three (3) Dimensional Signs. Signs that consist of, or have attached to them, one (1) or more three (3) dimensional objects (i.e., balls, cubes, clusters of objec sculpture, or statue-like trademarks), shall have a sign area of the sum of all areas using the four (4) vertical sides of the smallest cube that will encompass the sign See Figure 9-5.1606(a)(4).

(b) Materials. Signs shall be constructed of durable and attractive materials. Paper, cardboard, or other material subject to rapid deterioration shall be limited to tempor interior window signs. Fabric and vinyl signs shall be restricted to public service and civic identity signs, awning signs, banner signs, and temporary signs permitted pursu to Section 9-5.1610.

(c) Construction and Maintenance.

(1) All signs and supporting structures shall be installed in accordance with applicable provisions of the building regulations in Title 8.

(2) All signs, together with all supporting structures, shall be maintained in the following manner:

a. Signs shall be kept free of rust, dirt and chipped, cracked or peeling paint.

b. All hanging, dangling, torn or frayed parts of signs shall be promptly repaired, and graffiti and unauthorized attachments shall be removed.

c. Burned-out illumination shall be promptly replaced.

d. Sign areas shall be kept free and clear of all noxious substances, rubbish and weeds.

(3) If a sign is removed from its supporting structure for longer than ninety (90) days, the supporting structure shall be removed.

(d) Illumination. The illumination of signs, from either an internal or external source, shall be designed to avoid negative impacts on neighboring rights-of-way and properties. The following standards apply to all illuminated signs:

(1) Sign lighting shall not be of an intensity or brightness, or generate glare, that will create a public or private nuisance.

(2) External light sources shall be directed, shielded, and filtered to limit direct illumination of any object other than the sign.

(3) Illuminated roof signs and high-rise identification signs shall be dimmable, and shall be dimmed if necessary to address complaints of glare from occupants of buildings in a direct line of sight to the sign. Other sign types may also be required to be dimmable as a condition of approval.

(4) Exterior LED signs shall be subject to major design review pursuant to Section 9-5.1612(c), and shall be evaluated for conformance with the "Recommended M Time Brightness Levels for On-Premise Electronic Message Centers (EMC's)" dated April 2011 prepared by the International Sign Association.

(e) Changeable Copy Other Than Permitted Marquee Signs. Nonelectronic changeable copy shall cover no more than twenty percent (20%) of an establishment's tota allowed aggregate sign area, except for the following uses which are allowed up to seventy-five percent (75%) of sign area to be changeable copy: all public and civic us indoor theaters, other public assembly uses, and fuel price signs.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1607 Standards for Specific Sign Types.

Except as otherwise specified, all permanent signs shall comply with the standards in Table 9-5.1607. Signs erected on a site may be any combination of permitted sign types, subject to the limitations for individual sign types listed in this section, and any other applicable provisions of this article including, but not limited to, aggregate sign area. See Figure 9-5.1607 for illustrations of projecting, shingle, monument, and awning signs.

Table 9-5.1607: Standards for Specific Sign Types

Sign Type	Maximum Number Permitted	Maximum Area per Individual Sign	Maximum Height to Top of Sign	Location Requirements	Additional Regulations
(a) Individual Establishment Signs Allowed with Minor Design Review					
(1) Awning Sign	3 per nonresidential tenant or use	10 sq. ft. or 25% of surface area of awning, whichever is less	25' or top of second floor of building, whichever is less	Lowest point must be at least 9' above public sidewalk. Awnings permitted only on first and second floors of building.	May project no more than 4' from building wall and no more than 1/3 width of public sidewalk
(2) Banner Sign	3 per nonresidential tenant or use per street frontage	15 sq. ft.	25'	No portion may extend above highest point of parapet wall or eave line. Lowest point must be at least 9' above public sidewalk.	May project no more than 4' from building wall and no more than 1/3 width of public sidewalk
(3) Monument Sign	1 per nonresidential lot per street frontage	60 sq. ft. per face; no more than 2 faces	6'	N/A	Larger sign may be approved as part of Master Sign Program for overall site signage only
(4) Projecting Sign	1 per nonresidential tenant or use per street frontage	15 sq. ft.	25'	No portion may extend above highest point of parapet wall or eave line. Lowest point must be at least 9' above public sidewalk.	May project no more than 4' from building wall and no more than 1/3 width of public sidewalk
(5) Shingle Sign	1 per nonresidential tenant or use	4 sq. ft.	N/A	Lowest point must be at least 9' above public sidewalk	Illumination not permitted
(6) Wall Sign	1 per nonresidential tenant or use per street frontage	50 sq. ft. or 15% of tenant facade area, whichever is less	25'	Width may not exceed 75% of tenant facade width, or 25', whichever is less	Larger signs may be approved as part of Master Sign Program for overall site signage only
(7) Window Sign	1 per window or transparent door per nonresidential tenant or use	No more than 10% of area of window or transparent door	N/A	Ground floor or second floor only	N/A
(b) Individual Establishment Signs Allowed with Major Design Review					
(1) Entry Gateway	1 per nonresidential lot per street frontage	To be determined by Planning Commission			N/A
(2) High-Rise Identification Sign	2 per nonresidential building; 1 on any facade	1% of area of building facade on which sign is located	No portion of sign above top of parapet	Top story of building	Only permitted on buildings over 75' high. Changeable copy not permitted.
(3) Marquee Sign	1 per nonresidential building	To be determined by Planning Commission			May only contain changeable copy and images related to on-premises events

(4)	Roof Sign	1 per nonresidential building	To be determined by Planning Commission	N/A
(c)	**Signs Allowed Only as Part of a ~~Master Sign Program as Part of Overall Site Sig~~hage**			
(1)	Ground Sign	1 per nonresidential lot per street frontage	To be determined by Planning Commission	N/A
(2)	Tower Sign	1 per nonresidential lot per street frontage	To be determined by Planning Commission	N/A
(3)	Wall Sign exceeding maximum dimensions specified in (a) (6) of this table	To be determined by Planning Commission		N/A
(4)	Monument Sign over 6' in height and/or 60 sq. ft. in area	1 per nonresidential lot per street frontage	To be determined by Planning Commission	N/A

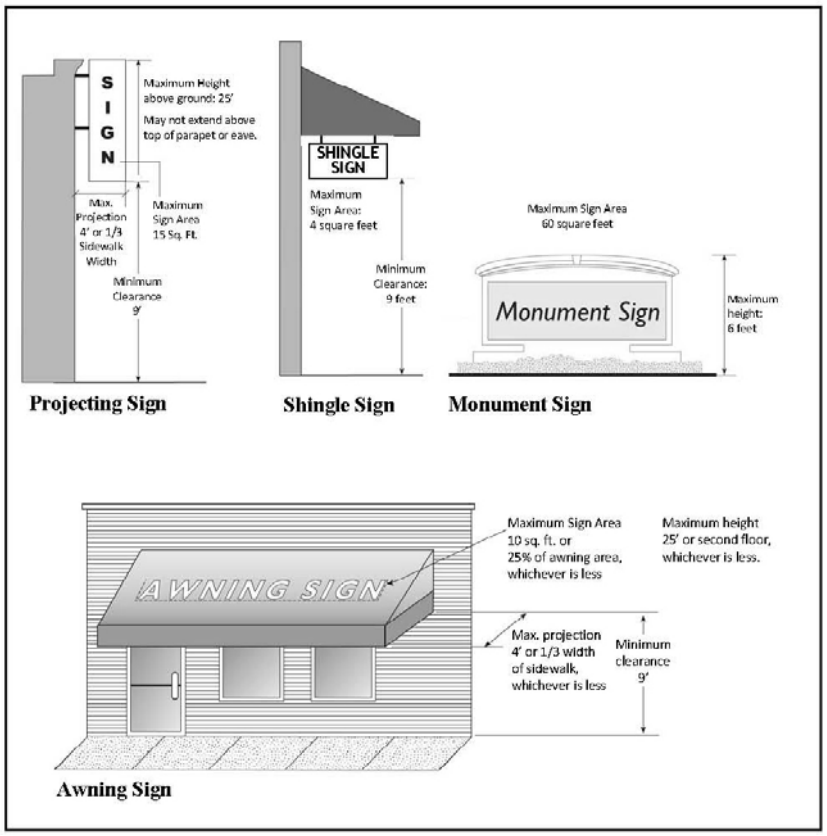


Figure 9-5.1607: Illustration of Projecting, Shingle, Monument, and Awning Signs

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-001, eff. Mar. 6, 2014)

9-5.1608 Sign Regulations in the RM Medium Density Residential Zone.

(a) Permitted Signs. In addition to the exempt signs listed in Section 9-5.1605, commercial establishments are allowed one (1) sign of up to ten (10) square feet per establishment, subject to minor design review approval pursuant to Section 9-5.1612.

(b) Standards for Specific Sign Types. Signs shall conform to the standards listed in Table 9-5.1607 except as modified by subsection (a) of this section.

(c) Illumination. No sign illumination is permitted except downward facing indirect illumination. No sign shall be internally illuminated.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1609 Sign Regulations in All Other Zones.

(a) Permitted Signs. In addition to the exempt signs listed in Section 9-5.1605, all sign types listed in Table 9-5.1607 are permitted, subject to the standards in the table Sign types not listed in Table 9-5.1607, or signs not in conformance with the standards in Table 9-5.1607, may be considered on a case-by-case basis. If the applicant proposes that such signs be included in the aggregate sign area allowed by subsection (b) of this section, they may be considered by the Director under the minor desig review procedure at Section 9-5.1612(b). If the applicant proposes that such signs not be included in the aggregate sign area allowed by subsection (b) of this section, t

shall be considered by the Planning Commission under the major design review procedure at Section 9-5.1612(c).

(b) Aggregate Sign Area.

(1) Individual Establishments.

a. The maximum aggregate sign area for individual establishments is one (1) square foot of sign area per linear foot of public frontage. "Public frontage" refer either building frontage on a public street or, if the establishment does not front on a public street, the building facade of the establishment accessible to the pu on which the main entrance to the establishment is located. In a multi-tenant property, the frontage is typically measured from lease-line to lease-line.

b. If an establishment has frontage on more than one (1) public street or more than one (1) publicly accessible facade, all such frontages may be included in t calculation of aggregate sign area, except service roads, alleys, and similar accessways intended primarily for service vehicles.

c. The following shall not be included in aggregate sign area:

i. Exempt signs other than business signs.

ii. Roof signs, high-rise identification signs, marquee signs, and entry gateway signs approved by the Planning Commission pursuant to Section 9-5.1612

iii. Signs that identify individual establishments but are part of the overall site signage of a Master Sign Program approved pursuant to Section 9-5.1613.

d. For any individual establishment, the total area of all signs, including exempt business signs but excluding all other signs listed in subsection (b)(1)(c) of thi section, shall not exceed the aggregate sign area calculated pursuant to this section.

(2) Site Signage. The aggregate sign area allowance for sites with multiple individual establishments shall be determined on a case-by-case basis by the Planning Commission as part of the approval of a Master Sign Program. The aggregate sign area for overall site signage shall be no more than is necessary to adequately identify the site and its major tenants, and shall not include the aggregate sign area of individual establishments, as determined pursuant to subsection (b)(1) of this section.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-001, eff. Mar. 6, 2014)

9-5.1610 Temporary Commercial Signs.

Temporary commercial signs meeting the requirements of this section may be permitted in all zones other than the RM Medium Density Residential zone upon the approv a minor design review permit pursuant to Section 9-5.1612(b). This section does not apply to temporary change of business signs, which are exempt from design review pursuant to Section 9-5.1605(f).

(a) Number. A maximum of two (2) temporary commercial signs may be displayed by any individual establishment at the same time.

(b) Area. The total area of all such temporary commercial signs shall not exceed thirty-two (32) square feet per individual establishment. This sign area shall not be included in the calculation of aggregate permanent sign area pursuant to Section 9-5.1609(b).

(c) Materials. Temporary commercial signs shall be constructed of durable and attractive materials. Paper, cardboard, or other material subject to rapid deterioration sh not be used. Fabric and vinyl signs are permitted.

(d) Location. Temporary commercial signs may be located anywhere on the site of the individual establishment, subject to minor design review approval. If located in windows or transparent doors, no more than twenty percent (20%) of the total area of any window or transparent door shall be covered by any combination of temporary commercial signs, exempt temporary window signs pursuant to Section 9-5.1605(s), and permanent window signs pursuant to (a)(7) in Table 9-5.1607.

(e) Duration. The time limit for display of a temporary commercial sign shall be forty-five (45) days, which may be renewed for one (1) additional period of forty-five (45) days upon payment of a second application fee. Two (2) consecutive forty-five (45) day periods may be approved at one (1) time upon the payment of two (2) fees, but n not be further extended.

(f) Illumination. Temporary signs shall not be illuminated.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013; Sec. 3 (part), Ord. 14-001, eff. Mar. 6, 2014)

9-5.1611 Design Principles.

The following design principles shall be used as criteria for review and approval of design review for individual signs and Master Sign Programs.

(a) Architectural Compatibility. A sign (including its supporting structure, if any) shall be designed as an integral design element of a building's architecture and shall be architecturally compatible, including color and scale, with any building to which the sign is to be attached and with surrounding structures. A sign that covers a window or spills over "natural" boundaries or architectural features and obliterates parts of upper floors of buildings is detrimental to visual order and generally is not permitted.

(b) Legibility. The size and proportion of the elements of the sign's message, including logos, letters, icons and other graphic images, shall be selected based on the average distance and average travel speed of the viewer. Sign messages oriented towards pedestrians may be smaller than those oriented towards automobile drivers. Colors chosen for the sign text and/or graphics shall have sufficient contrast with the sign background in order to be easily read during both day and night hours.

(c) Design Guidelines. All signs shall be subject to the applicable provisions of the Emeryville Design Guidelines, including but not limited to those pertaining to signs ar the area of the City in which a proposed sign is to be located, and to any other applicable design guidelines.

(d) Animated and Moving Signs. Animated, flashing, blinking, reflecting, revolving, or other similar signs, or signs with visibly moving or rotating parts or visible mechani movement of any kind, are generally discouraged unless they add appropriate visual interest compatible with their surroundings.

(e) Deviations from Design Principles. The Director may approve signs that do not adhere to the principles established in this section if he or she finds that the sign exh exceptional design quality or is of significance to the area where it will be displayed.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1612 Procedures for Individual Establishment Signs.

(a) Application. Application for a design review permit for individual establishment signs shall be submitted to the Planning and Building Department on a form provided the Director, accompanied by the fee as set forth in the Master Fee Schedule and application materials as determined necessary by the Director, including but not limited the following:

(1) A site plan that is fully dimensioned and drawn to scale showing all sign locations and elevations of buildings and signs.

(2) A fully dimensioned color drawing of each proposed sign indicating construction details and sign copy.

(3) Proposed colors, materials and methods of illumination.

(b) Minor Design Review.

(1) Types of Signs Eligible. The following types of signs shall be reviewed by the Director pursuant to the minor design review procedures in Article 4 of Chapter 7 the applicable provisions of this article:

Wall signs.

Projecting signs.

Banner signs.

Shingle signs.

Awning signs.

Window signs.

Monument signs no more than six feet (6') tall and sixty (60) square feet in area.

Temporary commercial signs.

(2) Findings. To approve a minor design review permit for individual establishment signs as listed in subsection (b)(1) of this section, all of the following findings m be made in addition to the findings required by Article 4 of Chapter 7:

a. The proposed signs will comply with all the applicable provisions of this article, including but not limited to aggregate sign area, standards for specific sign t and design principles.

b. The size, materials, colors, graphic style, illumination and other features of the proposed signs are in keeping with the visual character of the area.

c. The signs will be readable, taking into account the proportion between different parts of the sign, its visibility from important vantage points, and other relev design features.

d. The signs will relate well to the design of the building and be compatible with its architectural features, colors and textures.

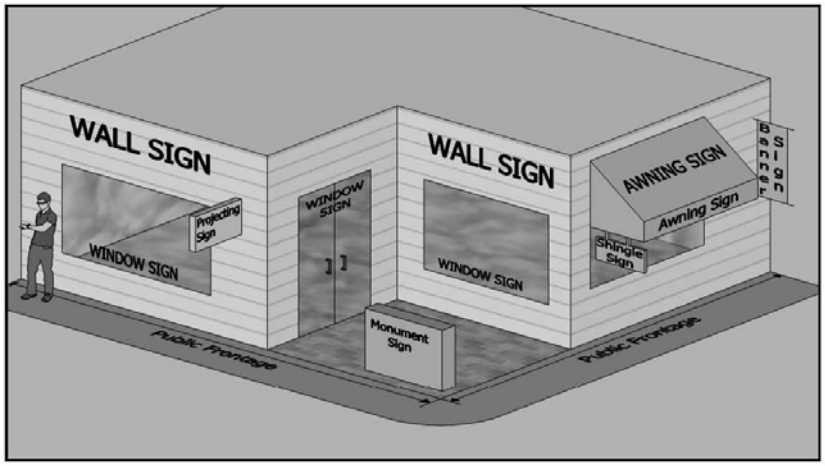


Figure 9-5.1612(b): Examples of Individual Establishment Signs Allowed with Minor Design Review.*

*** Note: This drawing is for illustrative purposes only; a typical establishment will not have all signs illustrated here. Total area of all signs may not exceed aggre sign area pursuant to Section 9-5.1609(b).**

(c) Major Design Review.

(1) Types of Signs Eligible. The following types of signs shall be reviewed by the Planning Commission pursuant to the major design review procedures in Article 4 Chapter 7 and the applicable provisions of this article:

Roof signs.

High-rise identification signs.

Marquee signs.

Entry gateways.

Exterior LED signs.

(2) Findings. To approve a major design review permit for individual establishment signs as listed in subsection (c)(1) of this section, all of the following findings m be made in addition to the findings required by Article 4 of Chapter 7:

a. The proposed sign is necessary because of the nature of the establishment and its location.

b. The proposed sign is no larger than is necessary to adequately identify the establishment, or the sign is of extraordinary design significance justifying its si

c. The proposed sign will comply with all the applicable provisions of this article, including but not limited to design principles.

d. The size, materials, colors, graphic style, illumination and other features of the proposed sign are in keeping with the visual character of the area.

e. The sign will be readable, taking into account the proportion between different parts of the sign, its visibility from important vantage points, and other relevant design features.

f. The sign will relate well to the design of the building and be compatible with its architectural features, colors and textures.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1613 Master Sign Programs.

(a) General.

(1) When Required. A Master Sign Program is required for all developments including five (5) or more retail tenant spaces, and is optional for any other multi-tenant nonresidential or mixed use development.

(2) Types of Signs Eligible. A Master Sign Program may include any type of sign eligible for individual establishment signs as indicated in Section 9-5.1612. In addition the following types of signs may only be allowed as part of a Master Sign Program, and only as overall site signage for the development:

Ground signs.

Tower signs.

Wall signs exceeding maximum dimensions at (a)(6) in Table 9-5.1607.

Monument signs exceeding six feet (6') in height and/or sixty (60) square feet in area.

(b) Application. Application for a Master Sign Program shall be submitted to the Planning and Building Department on a form provided by the Director, accompanied by fee as set forth in the Master Fee Schedule and application materials as determined necessary by the Director, including but not limited to the following:

(1) Text and drawings, including plans drawn to scale, which identify all signs proposed for the development, establishing their location, size, function and other characteristics needed to evaluate the extent of the signage proposed. Plans and drawings shall include a site plan, typical building elevations, and drawings of proposed overall site signage and generic sign types for individual establishments. Any anticipated recurring temporary signs shall be included.

(2) Computation of allowable area for all signs for each individual establishment, and of total area of all proposed signage. Maximum allowable aggregate area for individual establishments shall be no more than allowed by Section 9-5.1609(b)(1). Maximum allowable aggregate area for overall site signage shall be in addition to and shall be shown separately. The maximum area of such overall site signage shall be no more than is necessary to adequately identify the development and its major tenants.

(3) Design criteria for individual establishment signs dealing with colors, materials, illumination, graphic styles, placement, size, and other pertinent sign features.

(4) A written program of standards for individual establishment signs to be distributed to future tenants, including color, size, illumination, construction details, sign placement and size.

(c) Findings. In order to approve a Master Sign Program, the Planning Commission must make all of the following findings in addition to the findings required by Article Chapter 7:

(1) The proposed Master Sign Program will promote visual harmony and a cohesive appearance for the development while allowing an appropriate level of individ for each establishment.

(2) The proposed Master Sign Program will promote signs that relate well to the design of the buildings in the development in terms of compatibility with architectu features, colors and textures.

(3) The proposed Master Sign Program will promote signage that is in keeping with the visual character of the surrounding area.

(4) The total aggregate sign area allowed under the proposed Master Sign Program for each individual establishment does not exceed that allowed by Section 9-5.1609(b)(1).

(5) The height, size, and total aggregate area of overall site signage allowed under the proposed Master Sign Program is no more than is necessary to adequatel identify the development and its major tenants.

(6) The proposed Master Sign Program will comply with all the applicable provisions of this article, including but not limited to standards for specific sign types and design principles.

(d) Review of Individual Signs under a Master Sign Program. A proposal for individual signs under a Master Sign Program shall be reviewed by the Director for conformance with the requirements of the Master Sign Program and this article pursuant to the zoning compliance review procedures in Article 3 of Chapter 7. If the Dire determines that the proposal conforms to the requirements of the Master Sign Program and this article, a zoning compliance approval shall be issued. If the Director determines that the proposal does not conform to the requirements of the Master Sign Program and this article, a zoning compliance approval shall not be issued, and th applicant shall be advised as to how the proposal could be brought into compliance. The Director's determination of compliance or noncompliance may be appealed to th Planning Commission pursuant to Article 14 of Chapter 7.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1614 Nonconforming Signs.

(a) Continuance and Maintenance. Nonconforming signs that were legal when first installed, and which have not been modified so as to become illegal, may be continu and routine maintenance and repairs may be performed.

(b) Alterations and Additions to Nonconforming Signs. No nonconforming sign shall be moved, altered, or enlarged unless required by law or unless the moving, alterat or enlargement will result in the elimination of the nonconformity.

(c) Abandonment of Nonconforming Sign. Whenever a nonconforming sign has been abandoned, or the use of the property has been discontinued for a continuous pe of ninety (90) days, the nonconforming sign shall be removed.

(d) Restoration of a Damaged Sign.

(1) Whenever a nonconforming sign is destroyed by fire or other calamity to the extent of fifty percent (50%) or less of the sign's replacement value, the sign may restored and the nonconforming use of the sign may be resumed; provided, that restoration is started within six (6) months of the damage and diligently pursued to completion.

(2) Whenever a nonconforming sign is destroyed by fire or other calamity to a greater extent than fifty percent (50%) of the sign's replacement value, or is volunta removed or is required by law to be removed, the sign shall not be restored except in full conformity with the requirements of this article.

(e) Illegal Signs. A sign that was not legally established under the regulations that were applicable at the time it was established, whether before or after the adoption o these planning regulations, is an illegal sign. Any such illegal sign is hereby declared to be a public nuisance and shall be removed or legalized immediately.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1615 Definitions.

(a) Signs Generally. "Sign" means a structure, fixture, device, or material containing any combination of written copy, graphics, or symbols intended to promote a busin product, commodity, service, idea, or person, or to provide direction, identification, or information. "Sign" may include flags, streamers, pennants, banners, and balloons their intent is as stated above. Noncommercial works of art, including but not limited to murals, are not signs.

(b) Sign Types. The following definitions shall apply throughout this article, in addition to definitions contained elsewhere in this article, including, but not limited to, the prohibited signs listed in Section 9-5.1604 and the exempt signs listed in Section 9-5.1605.

(1) "Animated sign" means a sign which, by method or manner of illumination, flashes on or off, or blinks with varying light intensity, shows motion or creates the illusion of motion, or revolves to create the illusion of being on or off.

(2) "Awning sign" means a sign affixed permanently to the outside surface of an awning.

(3) "Banner sign" means a sign made of fabric or any nonrigid material with no enclosing framework, usually supported by horizontal poles protruding from a build wall.

(4) "Blade sign" means a projecting sign.

(5) "Business sign" means a sign that directs attention to the principal business, profession or industry located on the premises where the sign is displayed, to products sold, manufactured or assembled, or to services or entertainment offered on such premises.

(6) "Changeable copy sign" means a sign whose informational content can be changed or altered manually.

(7) "Channel letters" means three (3) dimensional individual letters or figures, with an open back or front, illuminated or nonilluminated, that are affixed to a buildin to a freestanding sign structure.

(8) "Construction sign" means a temporary sign that describes in words and/or drawings a planned future development project on a property.

(9) "Entry gateway sign" means a sign permanently affixed to an arch or other structure spanning over an entrance to a property.

(10) "Freedom of speech sign" means a noncommercial sign expressing an idea.

(11) "Freeway-oriented sign" means a sign that is oriented primarily to the traveling public using a freeway, and installed for the sole purpose of identifying major business locations in close proximity to the freeway.

(12) "Ground sign" means a sign that is permanently supported upon the ground by poles or braces and is not attached to any building or other structure. These include freestanding pole signs.

(13) "High-rise identification sign" means a sign located on the top story of a building that is over seventy-five feet (75') tall and identifying the name of the building owner, a tenant of the building, or any entity associated with the building.

(14) "Marquee sign" means a sign with a changeable message that advertises events, performances, or services, and that is displayed on a permanent structure made of rigid materials supported by and extending from the facade of a building.

(15) "Monument sign" means a low-profile freestanding sign erected upon or supported solely by a planter, pedestal base, or similar ground structure approximate the same width as the sign.

(16) "Moving sign" means a sign or any portion thereof that rotates, moves, or appears to move in some manner by mechanical, electrical, natural, or other means

(17) "Noncommercial sign" means a sign that does not promote a business, commodity, service, entertainment, product, or other attraction.

(18) "Organization sign" means a sign that identifies a nonprofit or other noncommercial organization.

(19) "Permanent sign" means a sign made of durable materials and intended to be displayed for an indefinite time period.

(20) "Political sign" means a sign that promotes a political candidate, party, or issue.

(21) "Projecting sign" means a sign, the surface of which is not parallel to the face of the supporting wall and which is supported wholly by the wall. This definition includes V- or wing-type signs. Also known as a "blade sign."

(22) "Roof sign" means a sign located above any portion of any roof of a building, including a canopy or other overhang.

(23) "Shingle sign" means a sign that hangs from a canopy or awning or from the ceiling of an arcade or passageway.

(24) "Temporary sign" means a sign that is intended to be displayed for a limited time period.

(25) "Tower sign" means a sign that is supported by a tall framework or structure, whether or not attached to a building, typically intended to identify a multi-tenan commercial complex and its major tenants.

(26) "Wall sign" means a sign painted on or affixed to, and wholly supported by, a building or other wall in such a manner that its exposed face is approximately parallel to the plane of such building or wall.

(27) "Window sign" means a sign painted or installed on a glass window or door and intended to be seen from the exterior of the structure in which the window or is located, or an interior sign located within two feet (2') of the inside of a window or door in a manner that it can be viewed from the exterior of the structure.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 17. Telecommunications Facilities

9-5.1701 Purpose.
This article provides standards and procedures to regulate the development, siting, installation, and operation of Wireless Communications Facilities, consistent with the applicable requirements of State and Federal law. The regulations are intended to provide for the appropriate development of Wireless Communications Facilities within t City to meet the needs of residents, business owners, and visitors, while protecting public health and safety and preventing visual blight and degradation of the communi aesthetic character, consistent with the General Plan.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1702 Applicability and Exemptions.
The requirements of this article apply to all Wireless Communications Facilities as defined in Section 9-5.1708.

(a) Principal Use. A Wireless Communications Facility that includes a transmission tower shall be considered a principal use and is subject to the provisions of Section 3.202.

(b) Accessory Use. A Wireless Communications Facility that includes Wireless Communications Antennas and related equipment shall be considered an accessory use is subject to the development requirements and standards in Section 9-5.1705.

(c) Exemptions. The following accessory facilities are exempt from this article:

(1) Licensed amateur (ham) radio, citizen band operations and emergency services radio.

(2) Hand-held, mobile, marine, and portable radio transmitters and/or receivers.

(3) Radio and television mobile broadcast facilities.

(4) Communication equipment and storage devices, such as computer servers, in cabinets or rooms completely located inside of permitted structures.

(5) A single ground or building-mounted receive-only radio, television or wireless cable antenna not exceeding the maximum height permitted by Article 2 of Chap including any mast, or a receive-only radio or television satellite dish antenna, subject to the following restrictions in residential districts:

a. Satellite Dish One (1) Meter or Less. A satellite dish that does not exceed one (1) meter in diameter and is for the sole use of a resident is permitted anywh on a lot in a residential district so long as it does not exceed the height of the ridgeline of the primary structure on the lot.

b. Antennas. An antenna that is mounted on any existing building or other structure that does not exceed twenty-five feet (25') in height is permitted. The ante must be for the sole use of a resident living on the lot on which the antenna is located.

(6) Any Wireless Communications Facility that is exempt from local regulation pursuant to the rules and regulations of the Federal Communications Commission (F or a permit issued by the California Public Utilities Commission (CPUC).

The owner or operator of such facility shall provide the Director with a copy of a current FCC or CPUC permit or a copy of applicable FCC regulations prior to its installation.

(7) Minor modifications to existing Wireless Communications Facility, including replacement in-kind or with smaller or less visible equipment, that meet the standard set forth in this article and will have little or no change in the visual appearance of the facility.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1703 Application Requirements.
An applicant shall file a written application pursuant to the application procedures in Article 2 of Chapter 7 and any specific application requirements established by the Director for this use.

(a) Co-Location. The applicant and owner of any site on which a Wireless Communications Facility is located shall cooperate and exercise good faith in co-locating oth Wireless Communications Facilities on the same support structures. Good faith shall include sharing technical information to evaluate the feasibility of co-location, and negotiations for erection of a replacement support structure to accommodate co-location. A competitive conflict to co-location or financial burden caused by sharing information normally will not be considered as an excuse to the duty of good faith. In the event a dispute arises as to whether a permittee has exercised good faith in accommodating other users, the City may require the applicant to obtain a third-party technical study at applicant's expense.

(1) All Wireless Communications Facilities shall make available unused space for co-location of other Wireless Communications Facilities, including space for these entities providing similar, competing services.

(2) All co-located and multiple-user Wireless Communications Facilities shall be designed to promote facility and site sharing. Telecommunications towers and necessary appurtenances, including but not limited to parking areas, access roads, utilities and equipment buildings, shall be shared by site users whenever possib

(3) No co-location is required where it can be shown that the shared use would or does result in significant interference in the broadcast or reception capabilities the existing Wireless Communications Facilities or failure of the existing facilities to meet Federal standards for emissions or cause the host to go offline for a signific period of time.

(4) Failure to comply with co-location requirements when feasible or cooperate in good faith as provided for in this subsection is grounds for denial of a permit req or revocation of an existing permit.

(b) If an applicant proposes a Wireless Communications Facility which is not co-located with an existing Wireless Communications Facility, the applicant shall provide a inventory of existing facilities within one-quarter (1/4) mile of the proposed site, including area which falls in a neighboring jurisdiction, and the applicant shall also provid explanation as to why the proposed facility cannot be co-located with an existing facility.

(c) In addition to any other requirements, all Wireless Communications Facilities applications shall, at a minimum, include the following information:

(1) Report on Alternatives. A report explaining why the Wireless Communications Facility is needed at the requested location. Any applicant seeking to construct a transmission tower shall explain why co-location or location on another kind of support structure is not feasible, including efforts made to develop such an alternativ the City has requested that the applicant co-locate its Wireless Telecommunications Facility on a site, the applicant shall explain why co-location is not feasible.

(2) Wireless Communications Facility Plans. Plans shall include a fully dimensioned diagram of the proposed Wireless Communications Facility, including height, shape, size and type of construction. Plans for a transmission tower must include information demonstrating that the structure will be able to accommodate at least (1) other similar telecommunication provider. A diagram showing the separation between the proposed facility and any existing facility or facilities on the same supp structure or site is required if co-location is planned.

(3) Site Plans. A fully dimensioned site/landscaping plan that includes: specific placement of the proposed tower, equipment shelters, and any other Wireless Telecommunications Facility on the site; elevation drawings; setbacks from lot lines; the location of existing structures, trees, and other significant site features; nota of those features proposed to be removed; the type and locations of plant materials proposed to screen the facility; and the proposed materials and colors for the facility.

(4) Visual Analysis. Photo-simulations showing views of the proposed facility from surrounding residential properties and public rights-of-way at varying distances a map indicating the locations used for the analysis and their distances from the site.

(5) Documentation of Compliance. Copies of all applicable licenses or other approvals required by the FCC and any other agency with authority to regulate Wirele Communications Facilities, including documentation of compliance with all conditions imposed in conjunction with such licenses or approvals, shall be provided. If th do not include an estimate of the anticipated radio frequency emissions, the applicant shall provide this separately.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1704 Review of Telecommunications Facilities.

A nonexempt Wireless Communications Facility shall not be established, expanded, or otherwise modified except in conformance with this article. Nonexempt facilities ar subject to design review and/or conditional use permit, pursuant to the procedures in Chapter 7, as follows:

(a) Wireless Communications Antennas in the RM Medium Density Residential zone may only be approved with a conditional use permit and are subject to design revie To grant such a conditional use permit, the following finding must be made in addition to the findings required by Article 5 of Chapter 7:

(1) That the antenna is necessary to fill a gap in coverage.

(b) Wireless Communications Antennas not in the RM Medium Density Residential zone are subject to major design review unless the antennas and all associated equipment are completely hidden from public view.

(c) Wireless Communications Antennas in the public right-of-way may only be approved with a conditional use permit, design review, and an encroachment agreement pursuant to Chapter 2 of Title 7.

(d) Wireless Communications Facilities which include a freestanding pole or transmission tower may only be approved with a conditional use permit and design review, only in the INL Light Industrial, INH Heavy Industrial, and P Public zoning districts.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1705 Development Requirements and Standards.

All Wireless Communications Facilities shall be located, developed, and operated in compliance with all of the following standards and with applicable standards of the zo district in which they are located.

(a) Location and Siting.

(1) No new transmission tower shall be located within one thousand feet (1,000') of an existing transmission tower, including existing transmission towers which a other jurisdictions.

(2) Pursuant to Section 6409 of the Federal Middle Class Tax Relief and Job Creation Act of 2012, any modification of a transmission tower which does not "substantially change" the tower is permitted.

(3) All Wireless Communications Facilities shall meet the building setback standards of the district in which they are proposed to be located.

(4) Facilities and equipment located in the public right-of-way shall be located, constructed, installed, and maintained in compliance with the applicable requiremer Title 7 and the following standards:

a. Facilities shall only be installed where they will not interfere with existing or future City uses of the right-of-way, the rights of private property owners, other fixtures and services, water hydrants or mains, wastewater stations, traffic control systems, or any other service or facility that benefits the City or its residents.

b. Facilities shall be installed within existing underground ducts or conduits whenever such ducts, conduits, manholes or other facilities have volume or capac that is available or will be available for third-party facilities. Utility boxes, power units, and similar fixtures shall be installed completely underground, unless the P Works Director finds that undergrounding would result in maintenance and operation problems that would interfere with service.

c. Overhead facilities may be installed on existing utility poles or replacement poles if the new pole has the same or better appearance than the existing pole.

d. Overhead facilities shall not be installed where a project has been implemented to remove existing overhead facilities.

e. Pedestals, amplifier units, equipment cabinets, and similar above-ground installations shall, where feasible, be located at least six inches (6") from any side and two feet (2') from driveway and curb edges. They shall not be placed in front of the primary entrance to a residence or retail business or at any other locati where they would unduly interfere with the operation of a business, including blocking views of the entrance or display windows.

(b) Height Requirements.

(1) Wireless Communications Antennas on Buildings. See Article 2 of Chapter 4 for requirements regulating building height and projections above the top of buildi

(2) Other Wireless Communications Facilities. A freestanding Wireless Communications Facility shall not exceed the height limit of the district in which it is located. When a Wireless Communications Antenna is mounted on a structure which is not a building it shall not exceed the height of the structure unless camouflaged as p the structure design, nor shall it exceed the height limit of the district in which the structure is located.

(c) Design and Screening. Wireless Communications Facilities shall be located, designed and screened to blend with the existing natural or built surroundings, as well any existing support structures, so as to reduce visual impacts to the extent feasible. All facilities, except for equipment within existing buildings, are subject to design rev Equipment cabinets shall be located within the building upon which antennas are placed, if technically feasible. Otherwise, equipment cabinets, and associated equipmer such as air conditioning units and emergency generators, shall be screened from view by a wall or landscaping, as approved by the Director.

(d) Performance Standards. Wireless Communications Facilities shall comply with the performance standards listed in Article 11 of this chapter, including but not limitec noise standards.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1706 Post-Installation Verification and Monitoring.
Post-installation verification and monitoring by qualified and objective third-party experts shall be required as follows:

(a) Validation of Proper Operation. Within forty-five (45) days of commencement of operations, the permittee shall provide verification that the radio frequency levels cc with FCC regulation and that all equipment complies with City noise regulations.

(b) Review Following One (1) Year. The permittee shall report to the City a measurement of radio frequency emissions one (1) year from the date of commencement of operation. Thereafter, such a report shall be available upon request by the City.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1707 Discontinuance of Use.
(a) As a condition of approval, an applicant for a building permit to erect or install a Wireless Communications Facility shall be required to post a cash or surety bond in form and amount acceptable to the Director to cover removal costs of the Wireless Communications Facility in the event that its use is abandoned or the approval is otherwise terminated.

(b) The service provider shall notify the Director of the intent to vacate a site at least thirty (30) days prior to the vacation. The permit for any Wireless Communications Facility that is not operated for a continuous period of twelve (12) months shall be deemed lapsed and the site will be considered abandoned unless:

(1) The Director has determined that the same operator resumed operation within six (6) months of the notice; or

(2) The City has received an application to transfer the permit to another service provider.

(c) No later than ninety (90) days from the date the use is discontinued or the provider has notified the Director of the intent to vacate the site, the owner of the abandc Wireless Communications Facility or the owner of the property on which the facility is sited shall remove all equipment and improvements associated with the use and sha restore the site to its original condition. The owner may use any bond or other assurances provided by the operator to do so. The owner or his agent shall provide writter verification of the removal of the facility within thirty (30) days of the date the removal is completed.

(d) If the Wireless Communications Facility is not removed within thirty (30) days after the permit has lapsed, the site shall be deemed to be a nuisance, and the Directc may cause the facility to be removed at the owner's expense or by calling any bond or other financial assurance to pay for removal. If there are two (2) or more users of single transmission tower, then this provision shall apply to the abandoned facility but not become effective for the tower until all users cease using the tower.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

9-5.1708 Definitions.
As used in this article:

(a) "Co-location" means the location of two (2) or more Wireless Communications Facilities on a single support structure or otherwise sharing a common location. For tl purposes of this article, co-location shall also include the location of Wireless Communications Facilities with other facilities such as water tanks, light standards, and othe utility facilities and structures.

(b) "Wireless Communications Antenna" means the physical device through which electromagnetic, wireless telecommunications signals authorized by the Federal Communications Commission are transmitted or received. It includes antennas and related equipment which may include cable, conduit and connectors, equipment pads shelters and cabinets, and access ladders. Antennas used by amateur radio operators are excluded from this definition.

(c) "Wireless Communications Facility" is a facility containing equipment for the transmitting or receiving of electromagnetic radio frequency waves. It may include Wirel Communications Antennas as define above and may also include the pole or tower on which equipment is mounted.

(Sec. 2 (Exh. A) (part), Ord. 13-001, eff. Mar. 7, 2013)

Article 18. Emergency Shelters

9-5.1801 Purpose.
This article establishes regulations governing emergency shelters. The City finds it necessary to establish such requirements and criteria in the interest of the public heal safety and welfare.

(Sec. 2 (part), Ord. 14-003, eff. Apr. 17, 2014)

9-5.1802 Applicability.
This article shall apply to the establishment of all emergency shelters.

(Sec. 2 (part), Ord. 14-003, eff. Apr. 17, 2014)

9-5.1803 Approval Procedure.

(a) Where Permitted by Right. In zoning districts in which emergency shelters are permitted by right, as indicated in Table 9-3.202, a proposal for an emergency shelte shall be reviewed by the Director, in consultation with the Chief Building Official and Fire Marshal, for conformance with the provisions of this article pursuant to the zonin compliance review procedures in Article 3 of Chapter 7. If the Director determines that the proposal conforms to the requirements of this article, a zoning compliance approval shall be issued. If the Director determines that the proposal does not conform to the requirements of this article, a zoning compliance approval shall not be issu and the applicant shall be advised as to how the proposal could be brought into compliance. The Director's determination of compliance or noncompliance may be appea to the Planning Commission pursuant to Article 14 of Chapter 7.

(b) Where Conditionally Permitted. In zoning districts in which emergency shelters require a conditional use permit, as indicated in Table 9-3.202, a proposal for an emergency shelter shall be considered by the Planning Commission pursuant to the major conditional use permit procedures in Article 5 of Chapter 7. In approving a conditional use permit for an emergency shelter, the Commission may designate reasonable conditions including, but not limited to, those deemed necessary to comply v the standards in Section 9-5.1804. The Commission's decision may be appealed to the City Council pursuant to Article 14 of Chapter 7.

(Sec. 2 (part), Ord. 14-003, eff. Apr. 17, 2014)

9-5.1804 Standards.
Emergency shelters shall comply with all of the following standards:

(a) Number of Beds. An emergency shelter may have up to sixty (60) beds.

(b) Waiting Area. A waiting and intake area containing a minimum of ten (10) square feet per bed shall be provided.

(c) Outdoor Activities: Outdoor activities, including but not limited to on-site waiting, client intake areas, and charitable food distribution, may only be conducted betwee hours of 8:00 a.m. to 6:00 p.m. and shall be screened from public view to the extent feasible.

(d) Location Requirement. No emergency shelter shall be established within three hundred feet (300') of any other emergency shelter. The distance between any two emergency shelters shall be measured in a straight line, without regard to intervening structures, from the closest property line of each shelter.

(e) Lighting. Adequate external lighting for security shall be provided.

(f) Security. Parking and outdoor facilities shall be designed for security for residents, visitors and employees.

(g) Management Plan. The shelter operator shall have a written management plan including provisions for staff training, neighbor relations, security, screening of resid to ensure compatibility with services provided at the facility, and programs for residents.

(h) On-Site Staffing. A minimum of one (1) staff member per twenty (20) beds shall be on duty and awake when the facility is in operation.

(i) Compliance with Federal, State, and Local Regulations. Emergency shelters shall comply with all Federal, State, and local licensing requirements.

(j) Compliance with Life Safety Regulations. Emergency shelters shall comply with all applicable building, fire, and health and safety codes, including maximum occupar restrictions.

(Sec. 2 (part), Ord. 14-003, eff. Apr. 17, 2014)

Article 19. Development Impact Fees

9-5.1901 Authority and Reference to This Article.
This article may be referred to as the "Impact Fee Ordinance," and is adopted pursuant to the authority of Article XI, Section 7 of the California Constitution, California Government Code Section 66000 et seq. (hereinafter "Mitigation Fee Act"), California Government Code Section 65000 et seq. (the planning and zoning law of the State California), and in accordance with the findings set forth in the ordinance codified in this article.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1902 Purpose of Fees.
Pursuant to this article, the City has established fees which will be imposed upon projects for the purpose of mitigating the impacts that the projects have upon the City's ability to provide public facilities.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1903 Use of Fees.
(a) The fees imposed by the City pursuant to this article, including any interest earning thereon, shall be used to pay, in whole or in part, the estimated reasonable cost c providing specified public facilities, as described in implementing resolutions; to reimburse the City for the cost of specified public facilities constructed by the City with fur from other sources; and to make reimbursement payments in accordance with Section 9-5.1915.

(b) As described in each implementing resolution, the specified public facilities will be categorized into separate and distinct sets of public facilities based upon the type c public facility to be provided, or other identifying features. Each separate set of specified public facilities described in an implementing resolution shall be referred to in th chapter as a "public facility category." Public facility categories include, but are not limited to: transportation and park and recreation facilities.

(c) For each separate public facility category, a separate fee shall be calculated and imposed, and each separately imposed fee shall be collected by the City and depos in a separate and distinct "fee fund," subject to the accounting requirements of the Mitigation Fee Act.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1904 Calculation of Fees by Implementing Resolutions.
Pursuant to the Mitigation Fee Act, in any action establishing, increasing, or imposing a fee as a condition of approval of a project, a technical report shall be prepared fc each public facility category, subject to City Council approval by implementing resolution.

Each implementing resolution shall include the following:

(a) Identify the purpose of the fee by identifying the estimated types and quantities of projects subject to the fee, and the public facility category to be funded by the fees

(b) Identify the use of the fee by identifying the specified public facilities to be funded by the fees.

(c) Determine how there is a reasonable relationship between the City's use of the fee and the types of projects on which the fee is to be imposed by demonstrating how project will benefit from the specified public facilities to be funded by the fees.

(d) Determine how there is a reasonable relationship between the need for the specified public facilities and the types of projects on which the fee is to be imposed, be demonstrating how the project creates a demand for the construction of the specified public facilities to be funded by the fees.

(e) Determine how there is a reasonable relationship between the amount of the fee and the cost of the specified public facility attributable to the project on which the fe to be imposed. This shall include two (2) elements: (1) a quantification of the estimated reasonable cost of providing the specified public facility, which may include the estimated costs of land acquisition, design, construction, construction administration, general administration (including establishment and enforcement) of the fee progra and contingencies; and (2) an identification of the method by which the City quantified the proportionate responsibility of each project for the cost of the specified public facilities, which may be satisfied by establishing a formula which reasonably quantifies the proportionate responsibility of various types of projects using standardized uni measurement.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1905 Obligation to Pay Fees.

(a) Each applicant for City approval of a project (including applications for a change of use and remodels) shall pay impact fees to the City, in accordance with the amou set forth in implementing resolutions, unless the applicant establishes, to the satisfaction of the Director, entitlement to a fee adjustment pursuant to Section 9-5.1908, a exemption pursuant to Section 9-5.1909, or approval of a fee credit pursuant to Section 9-5.1913.

(b) The obligation to pay impact fees pursuant to this article shall not replace an applicant's obligation to mitigate development project impacts in accordance with other requirements of State or local law, or to otherwise comply with applicable City site development standards (Chapter 4 of Title 9 of the Planning Regulations), Citywide us and development regulations (Chapter 5 of Title 9 of the Planning Regulations), or subdivision requirements (Chapter 6 of Title 9 of the Planning Regulations).

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1906 Timing of Payment.

(a) At Permit Issuance. Except as otherwise provided in this section, the fees for each project shall be paid in full prior to the issuance of the permit required for that proj

(b) After Permit Issuance. Upon application by an applicant, and approval by the Director, the fees for a project may be paid as follows:

(1) For projects that include residential dwelling units, if application of this subsection (b)(1) is specifically requested by the applicant, fees shall be paid before: (a) f inspection, or (b) issuance of a certificate of occupancy, whichever occurs first. The amount of the fee to be paid shall be the amount of the fee in effect on the date permit issuance. Notwithstanding the foregoing, the Director may deny the application to defer payment of fees for a residential project that does not meet the criter set forth in California Government Code Section 66007(b)(2)(A) pertaining to lower income affordable housing, and thus require the earlier payment of fees only if t criteria set forth in California Government Code Section 66007(b)(1) is satisfied.

(2) For any nonresidential project, fees shall be paid in their entirety on a date before the project receives (a) its final inspection, or (b) its certificate of occupancy, whichever occurs first. However, the amount of the fee to be paid for a project shall be the amount of the fee in effect, pursuant to implementing resolution, at the ti that full payment is made to the City.

(c) Implementation. The Director shall develop an application form for applicants to request payment of fees after permit issuance pursuant to subsection (b) of this secti and shall establish departmental guidelines for approval or denial of such applications.

The Director is authorized to execute and approve an application under this subsection (c).

(d) Compliance. No City official may issue a permit with respect to a project unless the fees required by this article have been paid as required by subsection (a) of this section or an application meeting the criteria set forth in subsection (c) of this section has been approved by the Director in connection with the project. No City official m certify final inspection or issue a certificate of occupancy for a project, or otherwise allow occupancy of a project, until the fees required by this article with respect to suc project are paid in accordance with this section.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1907 Amount of Payment.

(a) The amount of any fee to be paid for a project shall be the amount of the fee in effect, pursuant to implementing resolution, on the date of permit issuance. However, any project besides one covered by Section 9-5.1906(b)(1), if any fee is paid after the date of permit issuance in accordance with an application approved by the Directo pursuant to Section 9-5.1906(c), then the amount of the fee shall be the amount in effect, pursuant to implementing resolution, at the time that full payment is made to th City.

(b) The amount of any fee to be paid in connection with a change of use shall be: (1) the amount of the fee required pursuant to subsection (a) of this section for the proposed use, (2) minus the amount of the fee paid for the last legal use of the existing structure.

(c) The amount of any fee to be paid in connection with a remodel shall be the amount of the fee required pursuant to subsection (a) of this section for that portion of the remodel which generates impacts greater than the last legal use of the existing structure.

(d) In the event that the land use of a project is not included in the implementing resolution for determination of the amount of the fee, the Director shall determine their f set forth in the implementing resolution.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1908 Fee Adjustments by the City.

The City reserves the right to update and adjust each fee from time to time, in accordance with the Mitigation Fee Act. The fee in effect at the time any applicant has obta a vested development right shall be subject to adjustment by the City, as incorporated in updated implementing resolutions in effect at the time that full payment of the fe made, based upon any or all of the following criteria:

(a) Adjustments in the amount of the estimated construction costs of providing the specified public facilities based upon adjustments in accordance with the inflation inde

(b) Adjustments to replace estimated costs with actual costs (including carrying costs) of providing the specified public facilities.

(c) Adjustments to reflect more accurate cost estimates of providing the specified public facilities based upon more detailed analysis or design of the previously identified specified public facilities.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1909 Exemptions.
(a) Residential projects are exempt from impact fees for any remodel, as long as it does not result in a change of use.

(b) A project shall be exempt from the requirements of this impact fee ordinance if the applicant provides documentation, to the satisfaction of the Director, of Federal, St or local law (including a duly adopted resolution of the City Council) which established entitlement to the exemption.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1910 Request for Refund.
An applicant may request a refund of a fee previously paid in accordance with this article, and the Director may approve said refund, only if the applicant provides writter documentation to the satisfaction of the Director that: (a) the permit (including and planning permit or City approval on which the fee was imposed) is canceled or voided (b) work has not progressed on the permit which would allow commencement of a new use or change of use, and (c) the City has not already committed the fees to the construction of public facilities. Any refund made pursuant to this subsection shall include a deduction to cover the City's administrative costs of processing the refund.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1911 Application for Potential Credit.
An applicant may be eligible for a credit against impact fees otherwise owed, in return for providing a specified public facility to the City, only if the applicant submits a wr application to the Director which establishes compliance with all of the following requirements to the satisfaction of the City Council:

(a) Describe the specified public facilities (or portion thereof) proposed to be provided by the applicant, with a cross-reference to the description of the specified public facilities in the relevant implementing resolution.

(b) Identify the estimated cost of providing the specified public facilities (including construction, design, and/or land acquisition) for which the applicant is requesting cred

(c) Describe the project or projects to which the fee credit is requested to apply. The description shall be limited to all or a portion of the project for which specified public facilities are a condition of approval.

(d) Document that either: (1) the applicant is required, as a condition of approval for the project, to construct the specified public facilities; or (2) the applicant requests tc build one or more specified public facilities which benefit the project, and the City Council determines by resolution prior to the commencement of construction that it is in City's best interests for the specified public facilities to be built by the applicant.

(e) To the extent that credit for land acquisition costs are requested, document that: (1) the location of the land is advantageous to the public facility needs of the City; ar (2) the amount of credit for the land acquisition is equal to a reasonable estimate of the fair market value of the land based upon either: (a) documentation provided by th applicant to the City, or (b) in the event that the City determines that the documentation provided by the applicant does not provide a reasonable basis for determining th fair market value of the land, the applicant shall pay for the costs of a property appraisal by an expert selected by the City which is qualified to express an opinion as to t value of the property (pursuant to California Civil Procedure Code Section 1255.010).

(f) Notwithstanding the foregoing, no credit shall be provided against impact fees otherwise owed if an applicant has received a development bonus in accordance with Section 9-4.204 of these planning regulations for providing the specified public facility.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1912 Timing of Application for Potential Credit.
The application for credit shall be submitted by the applicant to the Director in accordance with the following timing requirements: (a) to the extent that the applicant requ credit for design or construction, the application shall be submitted concurrently with the submittal of improvement plans; (b) to the extent that the applicant requests cre for land dedication, the application shall be submitted prior to the recordation of a final map or parcel map for the project. The applicant may submit a late application onl the applicant establishes, to the satisfaction of the City, that, in light of new or changed circumstances, it is in the City's best interests to allow the late application.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1913 Amount of Potential Credit.
In the event that the City determines that the applicant has submitted a timely application in compliance with Section 9-5.1912, and it is in the City's best interest to allow applicant to provide the proposed specified public facility, the applicant shall be entitled to credit against fees otherwise owed in accordance with this article; provided, th the applicant enters into a public improvement agreement with the City approved by resolution of the City Council which includes the following essential terms:

(a) The design of the specified public facility is approved by the City.

(b) The applicant agrees to provide the specified public facilities in return for the credit to be allocated in accordance with the terms of the public improvement agreemen this article.

(c) The amount of credit available to the applicant shall not exceed the lesser of: (1) the applicant's actual cost of providing the specified public facility, to be evidenced b submittal of written documentation to the satisfaction of the City, and (2) the estimated cost of providing the specified public facility, as identified in the implementing resolution.

(d) The amount of credit available to the applicant for land dedication shall be equal to the amount identified in Section 9-5.1911(e).

(e) The land to be dedicated to the City shall not contain hazardous substances, waste or materials, as defined by State or Federal law, including petroleum, crude oil or fraction thereof, or shall otherwise be remediated in accordance with a cleanup plat approved by the City and applicable State or Federal regulatory agencies to a level suitable for the intended use. Further, the applicant shall agree to thereafter defend, indemnify, and hold the City harmless from all demands, claims, orders, costs, expenses, fees, penalties, and causes of action related to hazardous substances, waste or materials, as defined by State or Federal law, including petroleum, crude oil c and fraction thereof, located on or emanating from the property.

(f) The applicant provides improvement security in a form and amount acceptable to the City.

(g) The applicant agrees to pay prevailing wages for all public works as defined in the California Labor Code related to the specified public facility. The requirement for payment of prevailing wages shall be limited to the construction of the specified public facility for which a fee credit is granted, unless an exception to prevailing wage requirements applies under the California Labor Code, in which case the requirement for prevailing wages shall not apply.

(h) The applicant identifies the project to which the credit will be applied.

(i) The credit may only be applied to fees which would otherwise be owed for the public facility category relevant to the specified public facility.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1914 Request for Reimbursement.
To the extent that the applicant has a balance of credit available, the applicant may be entitled to potential reimbursement from the City only if the applicant submits a wr request to the Director which establishes the following:

(a) The request shall be made no later than one hundred eighty (180) days after the later to occur of: (1) issuance of the last permit within the project for which the application for credit was made, or (2) the date of the City's acceptance of the specified public facilities as complete.

(b) The request shall identify the specific dollar amount of the credit balance for which the applicant requests reimbursement, along with documentation in support therec This documentation shall include a calculation of the total credit available (pursuant to Section 9-5.1913(c)) less amount of credit previously allocated to offset fees pursu to Section 9-5.1913(h).

(c) The request must include a designation of the name and address of the legal entity to which reimbursement payments are to be made.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1915 Allocation of Reimbursements.
(a) In the event the Director determines that the applicant has properly submitted a request for reimbursement pursuant to Section 9-5.1914, the Director shall prepare a written determination to be approved by resolution of the City Council which will identify the dollar amount of the reimbursement. The dollar amount of the reimbursement shall be based upon the amount specified in the applicant's request, not to exceed the actual credit available to the applicant, less the total of all credit allocations to offs fees pursuant to Section 9-5.1913, as determined by the City.

(b) The City shall make reimbursement payments to the applicant or the entity identified by the applicant pursuant to Section 9-5.1914(c). The right to receive reimburser payments, if any, shall not run with the land.

(c) The City shall make reimbursement payments pursuant to a schedule approved by resolution of the City Council, and consistent with the approved capital improveme program. No interest shall accrue on the amount subject to reimbursement. The City shall not make and shall have no obligation to make reimbursement payments to an applicant from any source other than the relevant fee fund, nor shall any reimbursement be made in excess of the amount of fees deposited in the relevant fee fund.

(d) No reimbursement payment shall be made to an applicant until after the completion of construction by the applicant and acceptance of improvements by the City.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1916 Notice of Protest Rights.
(a) Each applicant is hereby notified that, in order to protest the imposition of any impact fee required by this article, the protest must be filed in accordance with the requirements of this article and the Mitigation Fee Act. Failure of any person to comply with the protest requirements of this article or the Mitigation Fee Act shall bar that person from any action or proceeding or any defense of invalidity or unreasonableness of the imposition. Notwithstanding language to the contrary, the provisions of Arti 14 of Chapter 7 of Title 9 of these Planning Regulations and Chapter 4 of Title 1 of the Emeryville Municipal Code shall not apply to a protest of the imposition of any imp fee required by this article.

(b) On or before the date on which payment of the fee is due, the applicant shall pay the full amount required by the City and serve a written notice to the Director with a the following information: (1) a statement that the required payment is tendered, or will be tendered when due, under protest; and (2) a statement informing the City of th factual elements of the dispute and the legal theory forming the basis for the protest.

(c) After receipt of the notice from the applicant, and prior to the informal hearing to be scheduled in accordance with Section 9-5.1917, the Director shall investigate the factual and legal adequacy of the applicant's protest. At the request of the Director, the applicant shall provide additional information or documentation in substantiation the protest.

(d) The applicant shall bear the burden of proving, to the satisfaction of the Director, entitlement to a fee adjustment. The evidence (information and documentation) to b submitted by the applicant in support of the protest shall include, but not be limited to, an identification of the amount of the fee which the applicant alleges should be imposed upon the project, and all factual and legal bases for the allegation. The applicant shall identify each portion of this impact fee ordinance and any implementing resolution which the applicant claims supports the allegation. The applicant shall identify each portion of this impact fee ordinance (in particular the elements summarizec Section 9-5.1904) and each portion of any implementing resolution (in particular the technical reports incorporated therein) which the applicant claims fails to support the City's imposition of the fee upon the project.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1917 Informal Hearing.
(a) The Director shall schedule an informal hearing regarding the protest, to be held no later than sixty (60) days after the imposition of the impact fees upon the project, with at least ten (10) days' prior notice to the applicant (unless either dates are otherwise agreed by the Director and the applicant).

(b) During the informal hearing, the Director shall consider the applicant's protest, relevant evidence assembled as a result of the protest, and any additional relevant evidence provided during the informal hearing by the applicant and the City. The Director shall provide an opportunity for the applicant to present additional evidence at hearing in support of the protest. However, in weighing relevant evidence, the Director may consider the extent to which the applicant provided requested substantiating evidence prior to the hearing.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1918 Director's determination.
When the Director determines that sufficient evidence has been submitted to decide the protest, the Director shall close the informal hearing and issue a written determination regarding the protest. The Director may continue the informal hearing in order to assemble additional relevant evidence. The Director's determination shall support the fee imposed upon the project unless the applicant establishes, to the satisfaction of the Director, entitlement to an adjustment to the fee.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1919 Appeal of Director's Determination.

Any applicant who desires to appeal a determination issued by the Director pursuant to Section 9-5.1918 shall submit a written appeal to the Director and the City Manag A complete written appeal shall include a complete description of the factual elements of the dispute and the legal theory forming the basis for the appeal of the Director' determination. An appeal received by the City Manager more than ten (10) calendar days after the Director's determination may be rejected as late. Upon receipt of a complete and timely appeal, the City Manager shall appoint an independent hearing officer to consider and rule on the appeal.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1920 Appeal Hearing.

The independent hearing officer shall, in coordination with the applicant and the Director, set the time and place for the appeal hearing, and provide written notice theree The independent hearing officer may issue directives related to the conduct of the hearing in an effort to facilitate resolution of the dispute or narrow the issues in dispute including prehearing or post-hearing briefs pursuant to a briefing schedule, and scheduling presentation of evidence during the hearing. The independent hearing office shall consider relevant evidence, provide an opportunity for the applicant and the City to present additional noncumulative evidence at the hearing, and preserve the complete administrative record of the proceeding.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1921 Decision of Independent Hearing Officer; Judicial Review.

(a) Within thirty (30) days after the independent hearing officer closes the hearing and receives post-hearing briefs (if any), the independent hearing officer shall issue a written decision on the appeal hearing which shall include a statement of findings of fact in support of the decision and notice that the time within which judicial review mu be sought is governed by this section. The written decision shall be mailed by first-class mail, postage prepaid, including a copy of the affidavit or certificate of mailing, to applicant. The independent hearing officer's discretion shall be limited to a determination that either supports the Director's determination or orders the City to refund all portion of the impact fees to the applicant. The applicant shall bear the burden of proving entitlement to a fee adjustment. The decision of the hearing officer is final and conclusive, and is subject to judicial review only in accordance with subsection (b) of this section.

(b) Judicial review of any decision of the hearing officer may be had pursuant to California Civil Procedure Code Section 1094.5 only if the petition for writ of mandate is no later than the ninetieth (90th) calendar day following the date the decision of the hearing office is provided to the applicant as provided in subsection (a) of this sectio

(c) If the applicant files a request for the record, as specified in subsection (d) of this section, within ten (10) calendar days after the date the decision of the hearing offic provided to the applicant as provided in subsection (a) of this section, the time within which a petition pursuant to California Civil Procedure Code Section 1094.5 may be shall be extended to not later than the thirtieth (30th) calendar day following the date on which the record is either personally delivered or mailed to the applicant or his c designee.

(d) The complete record of the proceedings shall be prepared by the City Clerk and shall be delivered to the applicant within ninety (90) calendar days after a written rec therefor has been filed by the applicant with the City Clerk. The City may recover from the applicant its actual costs for transcribing or otherwise preparing the record. Su record shall include the transcript of the proceedings, all pleadings, all notices and orders, any proposed or tentative decision by a hearing officer, the final decision, all admitted exhibits, all rejected exhibits in the possession of the City or hearing officer, all written evidence, and any other papers in the case.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1922 Costs of Protest.

The applicant shall pay all City costs related to any protest or appeal pursuant to this article, in accordance with the fee schedule adopted by the City. At the time of the applicant's protest, and at the time of the applicant's appeal, the applicant shall pay a deposit in an amount established by the City to cover the estimated reasonable cos processing the protest and appeal. If the deposit is not adequate to cover all City costs, the applicant shall pay the difference within twenty (20) days after receipt of writt notice from the Director.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1923 Applicant's Acknowledgment of Adjustment or Waiver.

As a condition of any adjustment or waiver made for a fee imposed upon a particular project, the applicant may be required by the Director or the independent hearing o to provide an acknowledgment and waiver, in a form acceptable to the Director, of any further right to protest or appeal the City's imposition of fees for that project.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

9-5.1924 Definitions.

As used in this article, all words, phrases, and terms shall be interpreted in accordance with the definitions set forth in the Mitigation Fee Act, unless otherwise defined he

(a) "Applicant" means any person, or other legal entity, which applies to the City for approval of a development project.

(b) "Change of use" means any proposed use of an existing structure (or a previously existing structure) on a parcel which: (1) requires a building permit, planning perm other permit or City approval, and (2) the proposed use is included in a different property use category (as defined in implementing resolutions) than the last legal use of existing structure, and (3) the proposed use results in impacts greater than the last legal use of the existing structure.

(c) "Fee" means, for the purpose of this article, a development impact fee imposed by the City in accordance with this article.

(d) "Fee fund" means each of the separate and distinct funds into which fees for each public facility category are deposited.

(e) "Impact fee ordinance" means this article.

(f) "Implementing resolution" means a resolution of the City Council of the City of Emeryville, including any technical report incorporated by reference, in which the findinç specified in Section 9-5.1904 are made for each public facility category.

(g) "Inflation index" means a recognized standard index (such as the Consumer Price Index), as determined by the City Council to be a reasonable method of calculating impact of inflation upon cost estimates set forth in implementing resolutions.

(h) "Mitigation Fee Act" means California Government Code Section 66000 et seq.

(i) "Permit" means the City building permit required for a project, or, if the project consists of a change of use for which no building permit is required, a zoning complianc review or any other permit or City approval required for the change of use.

(j) "Project" means any project as defined in Section 9-8.216(qq), and shall specifically include any building permit, planning permit, or any other permit or City approval required for a change of use. Project shall specifically include any change of use or remodel.

(k) “Public facility” means any public improvements, public services, or community amenities, as defined by the Mitigation Fee Act, including, but not limited to: transportat improvements, park and recreation facility improvements, and any similar public improvement for which the City has adopted an implementing resolution pursuant to this article.

(l) “Public facility category” means a separate and distinct set of public facilities as described in Section 9-5.1903(b).

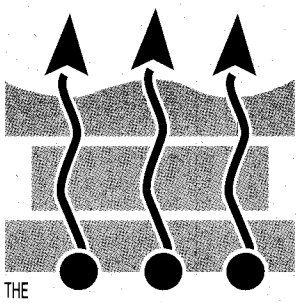
(m) “Remodel” means any proposed improvement or reconstruction of an existing structure (or a previously existing structure) on a parcel which: (1) requires a building permit, planning permit, or other permit or City approval, and (2) results in impacts greater than the last legal use of the existing structure.

(n) “Specified public facility” means those public facilities described in each implementing resolution, the total program costs of which are used as the basis for the calcul of a fee, as described in Section 9-5.1904.

(o) “Vested development rights” means an applicant’s right to proceed with development of a development project in substantial compliance with the local ordinances, policies, and standards in effect at the time that the rights vest, as the term is defined in the vesting tentative map statutes (California Government Code Sections 66498. through 66498.9), development agreement statutes (California Government Code Sections 65864 through 65869.5), and State law.

(Sec. 3 (part), Ord. 14-008, eff. Aug. 14, 2014)

Mobile Version



GROUNDWATER WELL REDEVELOPMENT AND SAMPLING REPORT

1400 Park Avenue
Emeryville, California

JANUARY 31, 2007

TRG Project #7103

Tel 714-730-5397

PO Box 1996, Tustin, California 92781-1996
www.reynolds-group.com

Fax 714-730-6476

TABLE OF CONTENTS

GROUNDWATER WELL REDEVELOPMENT AND SAMPLING REPORT

1400 Park Avenue
Emeryville, California

1.0 EXECUTIVE SUMMARY 1

2.0 BACKGROUND 2
2.1 Involved Parties 2

3.0 FIELDWORK 3
3.1 Well Redevelopment 3
3.2 Well Surveying 4
3.3 Groundwater Sampling 4
3.4 Groundwater Gradient 5

4.0 LABORATORY ANALYSES & RESULTS 4

5.0 CONCLUSIONS 6

6.0 RECOMMENDATIONS 7

Table 1 - Summary of Groundwater Elevation Data and Results
Figure 1 - Site Location Map
Figure 2 Plot Plan with Well Locations and Results
Figure 3 - Plot Plan with Groundwater Contours
Appendix A - Laboratory Analytical Results
Appendix B - Standard Operating Procedures
Appendix C - Field Data Sheets
Appendix D- Registered Survey of Groundwater Monitoring Wells
Appendix E - Site Specific Health & Safety Plan

1.0 EXECUTIVE SUMMARY

As specified in our Workplan for Groundwater Re-Development and Sampling, The Reynolds Group (TRG) conducted groundwater monitoring well redevelopment and sampling activities on January 8 and 15, 2007, at the property located at 1400 Park Avenue in Emeryville, California (Site). This report documents these activities and presents the results of the groundwater monitoring. Based on the results presented herein, TRG is also requesting closure of the Site on behalf of Emeryville Properties.

Included with this report are descriptions of TRG's groundwater monitoring and sampling procedures, groundwater elevation data and laboratory results (**Table 1**), a Site Location Map (**Figure 1**), Site Plot Plan With Groundwater Monitoring Results (**Figure 2**), and Site Plot Plan With Groundwater Contours measured on January 15, 2006 (**Figure 3**). Analytical results with chain of custody documentation are included as **Appendix A**, Standard Operating Procedures are attached as **Appendix B**, and field data sheets are attached as **Appendix C**, Registered Survey of Groundwater Monitoring Wells are attached in **Appendix D** and a Site Specific Health and Safety Plan in found in **Appendix E**.

On January 15, 2007, a week after re-developing the onsite groundwater monitoring wells, the three wells (MW-1, MW-2, and MW-4) were sampled by TRG. Samples were analyzed for Lead by EPA Method 200, for total petroleum hydrocarbons (TPH) as Diesel and as Gasoline by EPA Method 8015, and by EPA Method 8260B for benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) and other fuel oxygenates. Groundwater samples collected from each of the three wells had no detected levels of petroleum hydrocarbons, BTEX or fuel oxygenates. Trace levels of total lead, were detected ranging from 0.005 to 0.006 milligrams per liter (mg/L, see **Table 1** and **Figure 2**). These lead detections are well below the State of California Maximum Contamination Levels for Drinking Water (MCLs) of 0.015 mg/L as specified in the Lead and Copper Rule. Thus lead is not considered an impact to the groundwater.

TRG requests that this Site be granted regulatory closure. Based on results of the recent testing, there are no contaminants which present any threat to groundwater at the Site or any of the neighboring sites. The data presented herein demonstrates that there has been no release of hydrocarbons from the former USTs and ASTs at the Site.

2.0 BACKGROUND

The Site, located at 1400 Park Avenue in Emeryville, California (see **Figure 1 – Site Location Map**), formerly housed facilities operated by Chromex and The Charles Lowe Company. A former below grade concrete vault associated with Chromex's activities was removed in 1992. In December 1995, a "No Further Action" letter was issued for the Site by the Alameda County Health Care Services (ACHCS) for the former chromium vault at the Site. In 1995, Aqua Science Engineers (ASE) excavated and removed hydrocarbon contaminated soils beneath the vertical honing pit area. A total of 75 yards of soil was removed during these excavation activities. Also in 1995, ASE removed three 550 gallon steel underground storage tanks (USTs), which at one time contained diesel, motor oil and gasoline. In 1997, ASE successfully abandoned a half buried 700 gallon steel Above-Ground Storage Tank (AST). Three monitoring wells (MW-1, MW-2 and MW-4) were installed between 1994 and 1996 and still exist at the Site.

2.10 Involved Parties

The Reynolds Group was retained by the Site owner to perform the work associated with this project. The Alameda County Health Care Services Agency is the lead agency on this case as represented by Mr. Steven Plunkett.

TRG was responsible for managing this project and overseeing the developing, surveying, and sampling the groundwater monitoring wells, and producing this report. Associated Laboratories of

Orange, California, provided laboratory analytical services for groundwater samples. Associated Laboratories is a California State Certified Laboratory. Gregg Drilling helped with the well redevelopment, Blaine Tech Services assisted in the groundwater sampling, and Morrow Surveying of Sacramento, a liscensed surveyor located all three monitoring wells using a NAD 83 coordinate datum.

3.0 FIELDWORK

3.10 Well Redevelopment

On January 8, 2007, three monitoring wells (MW1, MW2, and MW4) at the Site were re-developed to obtain a representative sample of formation groundwater. The specific field procedures used in the groundwater well development and groundwater sampling are attached in **Appendix B – Standard Operating Procedures**.

Before purging any wells, the depth to groundwater was measured in all wells using a sounder. The depth to water and total depth of each well was recorded on a field data sheet to 0.01 feet accuracy. Development included surging the well screen to remove fines from the filter pack. After surging was completed and the sand content of the bailed water decreased, as determined by another well depth measurement, a submersible pump was used to continue well development. The surge block and submersible were decontaminated with Liquinox and deinozed water in between each well development. The three groundwater monitoring wells had a total of 162 gallons purged, with more than three boring volumes removed per well, to remove fines from the filter pack material. At the completion of well development, all physical parameters (temperature, dissolved oxygen, specific conductivity, pH, turbidity, and oxidation reduction potential) had stabilized (see **Appendix C – Field Data Sheets**). All field generated wastes (development water) were containerized on-Site in 55 gallon drums pending profiling for proper off-Site disposal.

3.20 Well Surveying

Since two of the three wells had been previously surveyed, MW-1, MW-3 and MW-4 were surveyed on January 8, 2007, by a California licensed surveyor, Morrow Surveying (see **Appendix D**). The groundwater well location was measured at the top of the casing and referenced to the elevation relative to mean sea level and latitude and longitude using NAD 83. The casing elevations are shown in **Table 1**. The field data sheets are included in **Appendix D**.

3.30 Groundwater Sampling

Prior to gauging and sampling activities on January 15, 2007, an equipment cleaning station was set up that consisted of a wash bucket and two rinse buckets. The wash bucket was filled with tap water and mixed with Liquinox cleaning solution. The first rinse bucket was filled with tap water and the second rinse bucket contained deionized water. The well sounder, pump and discharge hose were all cleaned, flushed and rinsed prior to their initial use on site and between each subsequent use.

Before purging any wells, the depth to groundwater was measured in all wells using a sounder. The depth to water and total depth of each well was recorded on a field data sheet to 0.01 feet accuracy. All wells were sampled using the (low-flow) sampling method shown in Appendix D. A 2" Grundfos Pump with tubing (separate tubing used for each well), attached to a Flow Cell, was used to purge, read, and collect groundwater samples. The pump was placed two feet above the total depth of the wells. The purge rate was one gallon per minute and the total purge volume per well varied from 17 to 27 gallons.

During purging, temperature, pH, conductivity, dissolved oxygen and turbidity were measured and recorded on the field data sheets. Purging continued until the monitored purge water characteristics stabilized. Approximately 68 gallons of purge water was generated during this groundwater

monitoring event. Purge and decontamination water was deposited into 55-gallon drums and stored on site pending profiling for proper offsite disposal.

Groundwater samples were collected directly from the submersible pump's tubing prior to the flow cell. Each water sample was collected into 5 vials (voas) preserved with hydrochloric acid, a 1 Liter Amber bottle (unpreserved), and one 250 mL plastic bottle (unpreserved). The sample containers we filled to avoid headspace and bubbles. The filled sample containers were labeled, placed in an ice-cooled chest, and transported following proper chain-of-custody procedures to Associated Laboratories.

3.40 Groundwater Gradient

Prior to purging and sampling on January 15, 2007, the depth to groundwater in each well was measured from the top of each well casing using an EnviroSupply and Service Inc. Interface Meter Model H. Oil. The groundwater flow direction and slope were calculated by determining the elevation of groundwater in each well relative to surveyed top-of-casing elevations (top of casing minus depth to water). These data are summarized in Table 1. The location and elevation of each well was professionally surveyed by Morrow Surveying Land Surveyors (see Appendix D).

Groundwater gauging during this event was performed in January 15, 2007. The groundwater flow direction was shown to be from the north northeast to the south southwest direction at 0.67 ft. per foot. Groundwater elevation contours for January 2007 are shown on the attached **Figure 3**.

4.0 LABORATORY ANALYSES & RESULTS

All samples were analyzed for TPH as gasoline and diesel by EPA Method 8015, for BTEX, MTBE and other fuel oxygenates by EPA Method 8260B, and for lead by EPA Method 200. The laboratory reports and chain-of-custodies are included as **Appendix A**.

Groundwater samples were collected from a total of three of the monitoring wells (MW1, MW-2, and MW-4). Groundwater samples from each of the three wells had no detected hydrocarbons or VOCs, including gasoline (<50 ug/L), diesel(<0.1 mg/L), benzene (<1 ug/L), toluene (<5 ug/L), ethylbenzene (<5 ug/L), xylenes (<5 ug/L), MTBE (<1 ug/L), di-isopropylether (<1 ug/L), ethyl-tertbutylether (<1 ug/L), tert-amylmethylether (<1 ug/L), and tertiary butyl alcohol (<10 ug/L). Trace concentrations of lead were detected in the three monitoring wells ranging from 0.005 to 0.006 mg/L. When compared to the California State Action Level of 0.015 mg/L, as specified in the Lead and Copper Rule, the concentrations of lead are not considered hazardous.

5.0 CONCLUSIONS

Based on the results of this current investigation, closure should be granted at the Site given that:

(1) No evidence of any release of hydrocarbons to the groundwater from the former on-site USTs and AST was found in this investigation. The data presented herein shows no detections of gasoline, diesel, BTEX, MTBE or other oxygenates in the groundwater samples collected at the Site;

(2) Trace levels of Total Lead were found, ranging from 0.005 to 0.006 mg/L0.006 mg/L. These lead detections are well below the State of California Maximum Contamination Levels for Drinking Water (MCLs) of 0.015 mg/L as specified in the Lead and Copper Rule. Thus lead is not considered an impact to the groundwater.

6.0 RECOMMENDATIONS

TRG recommends that the Alameda County Health Care Agency grant closure to the Site located at 13702 Ventura Boulevard based on the information provided herein.

If you have any questions or concerns pertaining to the Closure Request, I can be reached directly at (949)378-8448.

Thank you for your consideration of this matter.

Sincerely,
THE REYNOLDS GROUP
a California corporation by:

Gwen Tellegen, P.E.
Project Manager

TABLES

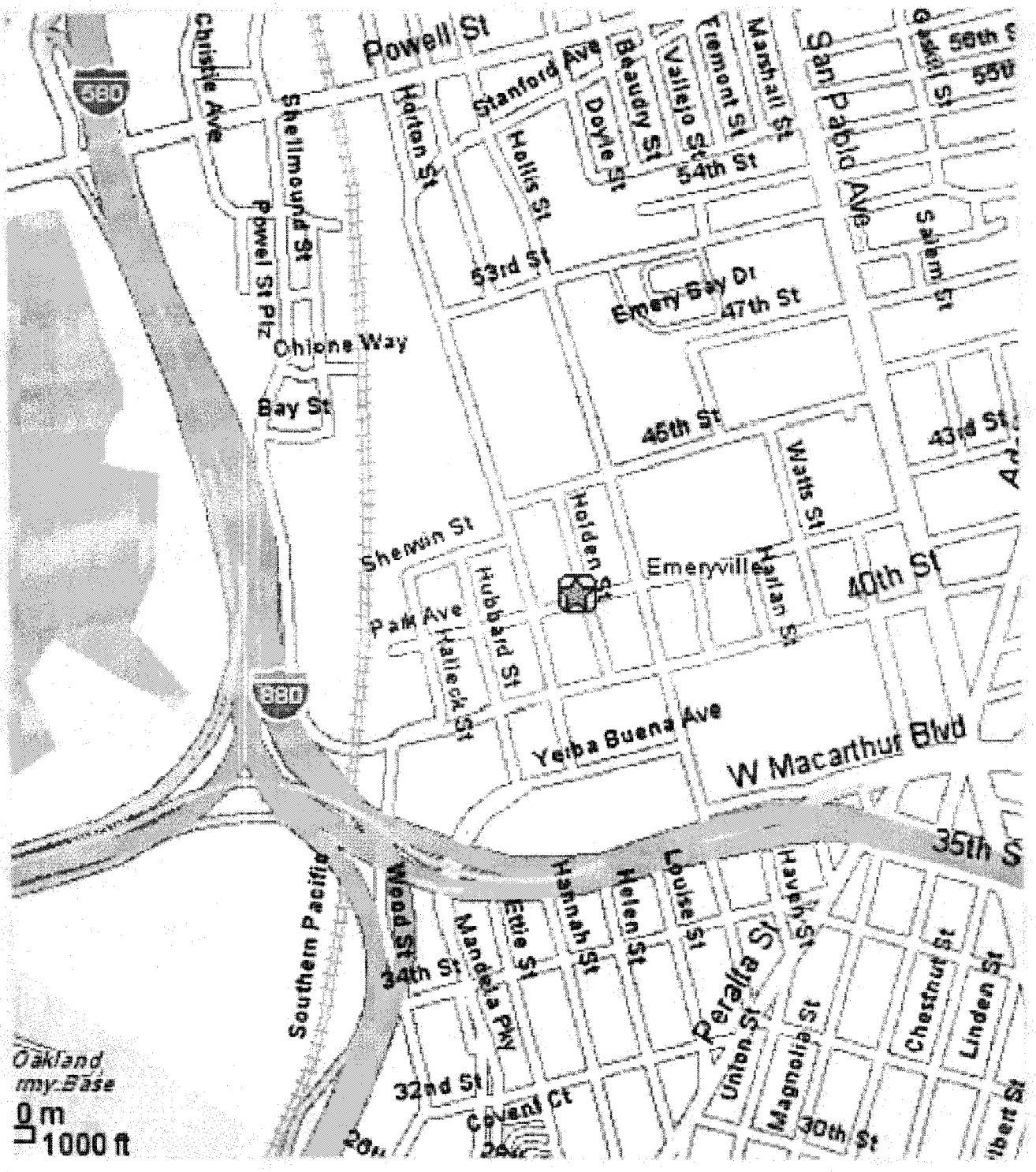
TABLE 1
Groundwater Elevation Data and Sample Results

Emeryville Properties
1400 Main St.
Emeryville, CA

Well ID	Date	Casing Elevation (ft)	Water Elevation (ft)	Depth to Water (ft)	EPA 8015 mg/L	EPA 8015B ug/L	200.7 Lead in H20 mg/L	EPA 8015B ug/L	EPA 8260B ug/L							
					TEPH Diesel	Gasoline	Lead	Benzene	Toluene	Ethylbenzene	Xylene	DIPE	ETBE	TAME	TBA	MTBE
MW-1 (Dup MW-X)	1/15/2007	19.17	10.94	8.23	<0.1	<50	0.006	<1	<5	<5	<5	<1	<1	<1	<10	<1
MW-2	1/15/2007	16.43	10.78	5.65	<0.1	<50	0.005	<1	<5	<5	<5	<1	<1	<1	<10	<1
MW-4	1/15/2007	14.6	10.28	4.32	<0.1	<50	0.006	<1	<5	<5	<5	<1	<1	<1	<10	<1
MW-X	1/15/2007	19.17	10.94	8.23	<0.1	<50	0.006	<1	<5	<5	<5	<1	<1	<1	<10	<1
Maximum Contamination Levels for Drinking Water (MCL)					na	na	0.015*	1	150	300	1750	na	na	na	na	5**

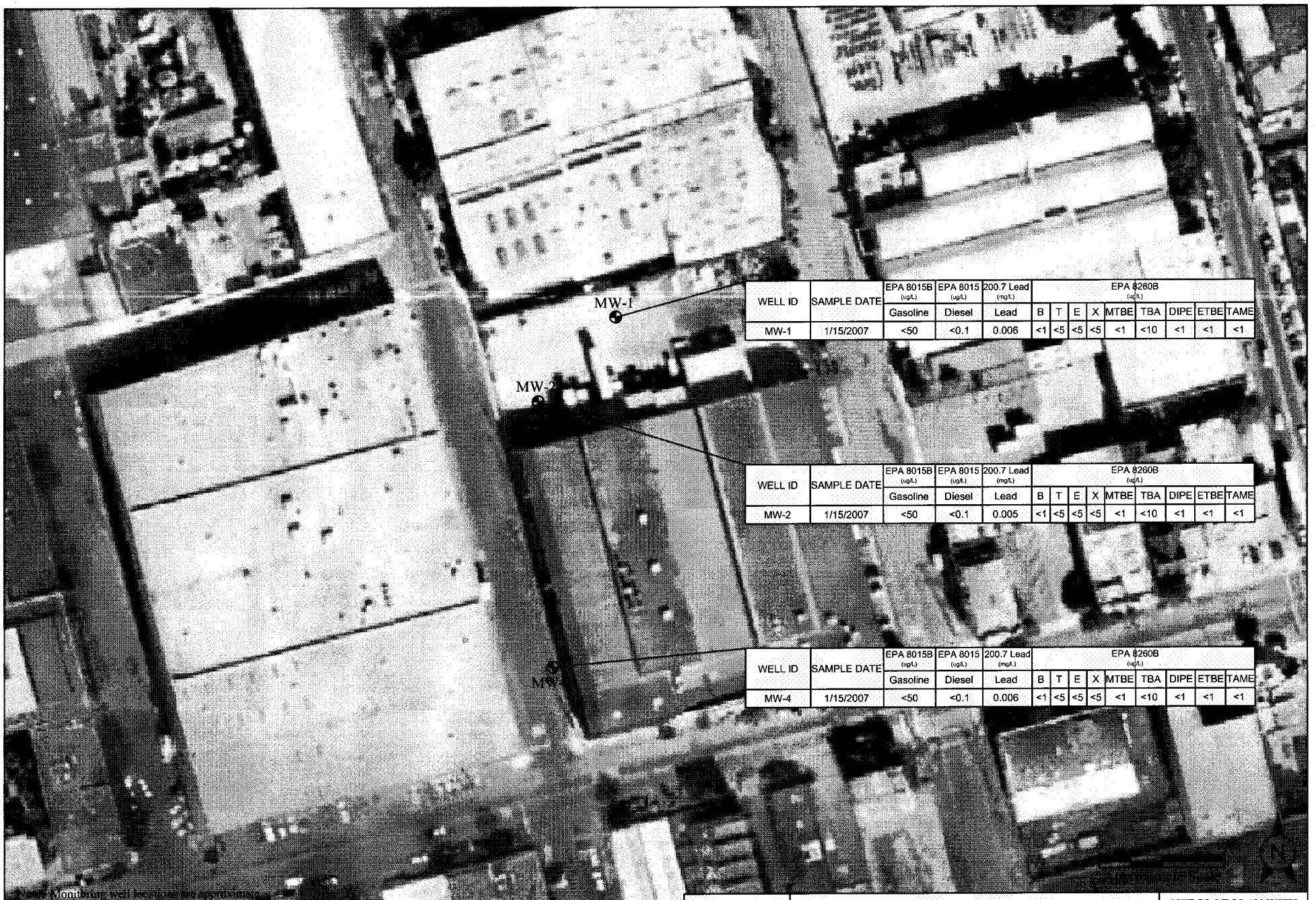
na = not available
* = Copper and Lead Rule
** = Secondary MCL

FIGURES



Adapted from Yahoo Maps.com

Project No: 7103		SITE LOCATION MAP
Date: January 2006		
1400 Park Avenue Emeryville, CA		FIGURE 1



WELL ID	SAMPLE DATE	EPA 8015B (ug/L)	EPA 8015 (ug/L)	200.7 Lead (mg/L)	EPA 8260B (ug/L)								
		Gasoline	Diesel	Lead	B	T	E	X	MTBE	TBA	DIPE	ETBE	TAME
MW-1	1/15/2007	<50	<0.1	0.006	<1	<5	<5	<5	<1	<10	<1	<1	<1

WELL ID	SAMPLE DATE	EPA 8015B (ug/L)	EPA 8015 (ug/L)	200.7 Lead (mg/L)	EPA 8260B (ug/L)								
		Gasoline	Diesel	Lead	B	T	E	X	MTBE	TBA	DIPE	ETBE	TAME
MW-2	1/15/2007	<50	<0.1	0.005	<1	<5	<5	<5	<1	<10	<1	<1	<1

WELL ID	SAMPLE DATE	EPA 8015B (ug/L)	EPA 8015 (ug/L)	200.7 Lead (mg/L)	EPA 8260B (ug/L)								
		Gasoline	Diesel	Lead	B	T	E	X	MTBE	TBA	DIPE	ETBE	TAME
MW-4	1/15/2007	<50	<0.1	0.006	<1	<5	<5	<5	<1	<10	<1	<1	<1

Note: Monitoring well locations are approximate.
See Appendix E for actual survey locations.

Legend:

MW-4 - Groundwater Monitoring Well

NOTE:
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl Tertiary Butyl Ether
ND# = Below Laboratory Reporting Limit

DIPE = Di isopropyl ether
ETBE = Ethyl tertiabutylether
TAME = Tertiary amyl methyl ether
TBA = Tertiary-butyl alcohol

THE REYNOLDS GROUP
ENVIRONMENTAL SERVICES

Site Name: Emeryville Properties
1400 Park Avenue, Emeryville, CA

SITE PLOT PLAN WITH GROUNDWATER MONITORING WELL RESULTS

Prepared By: The Reynolds Group

Project No: 7103

Date: January 2007

FIGURE 2



Monitoring well locations are approximate
See Appendix E for actual survey locations

Legend:

MW-4 - Groundwater Monitoring Well

10.35 - Groundwater Elevation Contour

THE REYNOLDS GROUP ENVIRONMENTAL SERVICES

Site Name: Emeryville Properties 1400 Park Avenue, Emeryville, CA		SITE PLOT PLAN WITH GROUNDWATER ELEVATION CONTOURS
Prepared By: The Reynolds Group	Project No: 7103 Date: January 2007	FIGURE 3

APPENDIX A

Laboratory Analytical Results

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868 - 714/771-6900

FAX 714/538-1209

CLIENT The Reynolds Group (6428)
ATTN: Gwen Tellegan
100 E. San Marcos Blvd. # 400
San Marcos, CA 92069

LAB REQUEST 183068

REPORTED 01/24/2007
RECEIVED 01/16/2007

PROJECT #7163
Emeryville Props LLC

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.	Client Sample Identification
769936	MW-2
769937	MW-1
769938	MW-X
769939	TB
769940	FB
769941	MW-4
769942	Laboratory Method Blank

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.
Vice President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

The reports of the Associated Laboratories are confidential property of our clients and may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

TESTING & CONSULTING
Chemical
Microbiological
Environmental

JAN-26-2007 16:00 FROM-Associated Laboratories 714-538-1209 T-455 P.001 F-348

Order #: 769936
Matrix: WATER
Date Sampled: 01/15/2007
Time Sampled: 09:10
Sampled By:

Client: The Reynolds Group
Client Sample ID: MW-2

Analyte	Result	DF	DLR	Units	Date/Analyst
200.7 Lead in water by ICP					
Lead	0.005	1	0.005	mg/L	01/17/07 NVK
8015 TEPH Diesel					
TEPH Diesel	ND	1	0.1	mg/L	01/17/07 AF
Surrogates				**Units**	**Control Limits**
o-Terphenyl (sur)	120			%	55 - 200
8260B BTEX/MTBE Only					
Benzene	ND	1	1	ug/L	01/20/07 RP
Ethyl benzene	ND	1	5	ug/L	01/20/07 RP
Methyl-tert-butylether (MTBE)	ND	1	1	ug/L	01/20/07 RP
Toluene	ND	1	5	ug/L	01/20/07 RP
Xylenes, total	ND	1	5	ug/L	01/20/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	ug/L	01/20/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	01/20/07 RP
Tert-amylmethylether (TAME)	ND	1	1	ug/L	01/20/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	ug/L	01/20/07 RP
Surrogates				**Units**	**Control Limits**
Surr1 - Dibromofluoromethane	90			%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	106			%	70 - 130
Surr3 - Toluene-d8	100			%	70 - 130
Surr4 - p-Bromofluorobenzene	107			%	70 - 130
8015B - Gasoline					
Gasoline	ND	1	50	ug/L	01/17/07 LD
Surrogates				**Units**	**Control Limits**
a,a,a-Trifluorotoluene	81			%	55 - 200

DLR = Detection limit for reporting purposes. ND = Not Detected below indicated detection limit. DF = Dilution Factor

JAN-25-2007 16:00 FROM-Associated Laboratories 714-538-1209 T-455 P.002/017 F-348

Order #: 769937
Matrix: WATER
Date Sampled: 01/15/2007
Time Sampled: 10:00
Sampled By:

Client: The Reynolds Group
Client Sample ID: MW-1

Analyte	Result	DF	DLR	Units	Date/Analyst
200.7 Lead in water by ICP					
Lead	0.006	1	0.005	mg/L	01/17/07 NVK
8015 TEPH Diesel					
TEPH Diesel	ND	1	0.1	mg/L	01/17/07 AF
Surrogates				**Units**	**Control Limits**
o-Terphenyl (sur)	110			%	55 - 200
8260B BTEX/MTBE Only					
Benzene	ND	1	1	ug/L	01/20/07 RP
Ethyl benzene	ND	1	5	ug/L	01/20/07 RP
Methyl-tert-butylether (MTBE)	ND	1	1	ug/L	01/20/07 RP
Toluene	ND	1	5	ug/L	01/20/07 RP
Xylenes, total	ND	1	5	ug/L	01/20/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	ug/L	01/20/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	01/20/07 RP
Tert-amylmethylether (TAME)	ND	1	1	ug/L	01/20/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	ug/L	01/20/07 RP
Surrogates				**Units**	**Control Limits**
Surr1 - Dibromofluoromethane	90			%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	106			%	70 - 130
Surr3 - Toluene-d8	104			%	70 - 130
Surr4 - p-Bromofluorobenzene	105			%	70 - 130
8015B - Gasoline					
Gasoline	ND	1	50	ug/L	01/17/07 LD
Surrogates				**Units**	**Control Limits**
a,a,a-Trifluorotoluene	59			%	55 - 200

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

JAN-25-2007 16:00 FROM-Associated Laboratories 714-538-1209 T-455 P.003/017 F-348

Order #: 769938
Matrix: WATER
Date Sampled: 01/15/2007
Time Sampled: 10:02
Sampled By:

Client: The Reynolds Group
Client Sample ID: MW-X

Analyte	Result	DF	DLR	Units	Date/Analyst
200.7 Lead in water by ICP					
Lead	0.006	1	0.005	mg/L	01/17/07 NVK
8015 TEPH Diesel					
TEPH Diesel	ND	1	0.1	mg/L	01/17/07 AF
Surrogates				**Units**	**Control Limits**
o-Terphenyl (sur)	115			%	55 - 200
8260B BTEX/MTBE Only					
Benzene	ND	1	1	ug/L	01/20/07 RP
Ethyl benzene	ND	1	5	ug/L	01/20/07 RP
Methyl-tert-butylether (MTBE)	ND	1	1	ug/L	01/20/07 RP
Toluene	ND	1	5	ug/L	01/20/07 RP
Xylenes, total	ND	1	5	ug/L	01/20/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	ug/L	01/20/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	01/20/07 RP
Tert-amylmethylether (TAME)	ND	1	1	ug/L	01/20/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	ug/L	01/20/07 RP
Surrogates				**Units**	**Control Limits**
Surr1 - Dibromofluoromethane	89			%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	105			%	70 - 130
Surr3 - Toluene-d8	102			%	70 - 130
Surr4 - p-Bromofluorobenzene	105			%	70 - 130
8015B - Gasoline					
Gasoline	ND	1	50	ug/L	01/17/07 LD
Surrogates				**Units**	**Control Limits**
a,a,a-Trifluorotoluene	61			%	55 - 200

DLR = Detection limit for reporting purposes. ND = Not Detected below indicated detection limit. DF = Dilution Factor

JAN-25-2007 16:00 FROM-Associated Laboratories 714-538-1209 T-455 P.004/017 F-348

Order #: 769939
Matrix: WATER
Date Sampled: 01/15/2007
Time Sampled: 10:30
Sampled By:

Client: The Reynolds Group
Client Sample ID: TB

Analyte	Result	DF	DLR	Units	Date/Analyst
8260B BTEX/MTBE Only					
Benzene	ND	1	1	ug/L	01/20/07 RP
Ethyl benzene	ND	1	5	ug/L	01/20/07 RP
Methyl-tert-butylether (MTBE)	ND	1	1	ug/L	01/20/07 RP
Toluene	ND	1	5	ug/L	01/20/07 RP
Xylenes, total	ND	1	5	ug/L	01/20/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	ug/L	01/20/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	01/20/07 RP
Tert-amylmethylether (TAME)	ND	1	1	ug/L	01/20/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	ug/L	01/20/07 RP
Surrogates				**Units**	**Control Limits**
Surr1 - Dibromofluoromethane	91			%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	107			%	70 - 130
Surr3 - Toluene-d8	102			%	70 - 130
Surr4 - p-Bromofluorobenzene	104			%	70 - 130
8015B - Gasoline					
Gasoline	ND	1	50	ug/L	01/17/07 LD
Surrogates				**Units**	**Control Limits**
a,a,a-Trifluorotoluene	88			%	55 - 200

DLR = Detection limit for reporting purposes. ND - Not Detected below indicated detection limit, DF = Dilution Factor

JAN-25-2007 16:00 FROM-Associated Laboratories 714-538-1209 T-455 P.005/017 F-348

Order #: 769940 **Client:** The Reynolds Group
Matrix: WATER **Client Sample ID:** FB
Date Sampled: 01/15/2007
Time Sampled: 10:25
Sampled By:

Analyte	Result	DF	DLR	Units	Date/Analyst
200.7 Lead in water by ICP					
Lead	ND	1	0.005	mg/L	01/17/07 NVK
8015 TEPH Diesel					
TEPH Diesel	ND	1	0.1	mg/L	01/17/07 AF
Surrogates				**Units**	**Control Limits**
o-Terphenyl (sur)	100			%	55 - 200
8260B BTEX/MTBE Only					
Benzene	ND	1	1	ug/L	01/20/07 RP
Ethyl benzene	ND	1	5	ug/L	01/20/07 RP
Methyl-tert-butylether (MTBE)	ND	1	1	ug/L	01/20/07 RP
Toluene	ND	1	5	ug/L	01/20/07 RP
Xylenes, total	ND	1	5	ug/L	01/20/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	ug/L	01/20/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	01/20/07 RP
Tert-amylmethylether (TAME)	ND	1	1	ug/L	01/20/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	ug/L	01/20/07 RP
Surrogates				**Units**	**Control Limits**
Surr1 - Dibromofluoromethane	87			%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	102			%	70 - 130
Surr3 - Toluene-d8	100			%	70 - 130
Surr4 - p-Bromofluorobenzene	107			%	70 - 130
8015B - Gasoline					
Gasoline	ND	1	50	ug/L	01/18/07 LD
Surrogates				**Units**	**Control Limits**
a,a,a-Trifluorotoluene	94			%	55 - 200

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

JAN-25-2007 16:00 FROM-Associated Laboratories 714-538-1209 T-455 P.006/017 F-348

Order #: 769941
Matrix: WATER
Date Sampled: 01/15/2007
Time Sampled: 10:55
Sampled By:

Client: The Reynolds Group
Client Sample ID: MW-4

Analyte	Result	DF	DLR	Units	Date/Analyst
200.7 Lead in water by ICP					
Lead	0.006	1	0.005	mg/L	01/17/07 NVK
8015 TEPH Diesel					
TEPH Diesel	ND	1	0.1	mg/L	01/17/07 AF
Surrogates				**Units**	**Control Limits**
o-Terphenyl (sur)	135			%	55 - 200
8260B BTEX/MTBE Only					
Benzene	ND	1	1	ug/L	01/20/07 RP
Ethyl benzene	ND	1	5	ug/L	01/20/07 RP
Methyl-tert-butylether (MTBE)	ND	1	1	ug/L	01/20/07 RP
Toluene	ND	1	5	ug/L	01/20/07 RP
Xylenes, total	ND	1	5	ug/L	01/20/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	ug/L	01/20/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	01/20/07 RP
Tert-amylmethylether (TAME)	ND	1	1	ug/L	01/20/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	ug/L	01/20/07 RP
Surrogates				**Units**	**Control Limits**
Surr1 - Dibromofluoromethane	90			%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	108			%	70 - 130
Surr3 - Toluene-d8	102			%	70 - 130
Surr4 - p-Bromofluorobenzene	105			%	70 - 130
8015B - Gasoline					
Gasoline	ND	1	50	ug/L	01/18/07 LD
Surrogates				**Units**	**Control Limits**
a,a,a-Trifluorotoluene	192			%	55 - 200

DLR = Detection limit for reporting purposes. ND = Not Detected below indicated detection limit. DF = Dilution Factor

Order #: 769942
Matrix: WATER
Date Sampled:
Time Sampled:
Sampled By:

Client: The Reynolds Group
Client Sample ID: Laboratory Method Blank

Analyte	Result	DF	DLR	Units	Date/Analyst
200.7 Lead in water by ICP					
Lead	ND	1	0.005	mg/L	01/17/07 NVK
8015 TEPH Diesel					
TEPH Diesel	ND	1	0.1	mg/L	01/17/07 AF
				Units	**Control Limits**
Surrogates					
o-Terphenyl (sur)	130			%	55 - 200
8260B BTEX/MTBE Only					
Benzene	ND	1	1	ug/L	01/20/07 RP
Ethyl benzene	ND	1	5	ug/L	01/20/07 RP
Methyl-tert-butylether (MTBE)	ND	1	1	ug/L	01/20/07 RP
Toluene	ND	1	5	ug/L	01/20/07 RP
Xylenes, total	ND	1	5	ug/L	01/20/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	ug/L	01/20/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	01/20/07 RP
Tert-amylmethylether (TAME)	ND	1	1	ug/L	01/20/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	ug/L	01/20/07 RP
				Units	**Control Limits**
Surrogates					
Surr1 - Dibromofluoromethane	89			%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	104			%	70 - 130
Surr3 - Toluene-d8	102			%	70 - 130
Surr4 - p-Bromofluorobenzene	107			%	70 - 130
8015B - Gasoline					
Gasoline	ND	1	50	ug/L	01/17/07 LD
				Units	**Control Limits**
Surrogates					
a,a,a-Trifluorotoluene	93			%	55 - 200

DLR = Detection limit for reporting purposes. ND = Not Detected below indicated detection limit. DF = Dilution Factor

JAN-26-2007 16:00 FROM-Associated Laboratories 714-538-1208 T-455 P.008/017 F-348

ASSOCIATED LABORATORIES
QA REPORT FORM - METHOD 200.7 / 6010

QC Sample: 183069-769945 H# 011707 W1

Matrix: WATER

Prep. Date: January 17, 2007

Analysis Date: January 17, 2007

Lab ID#'s in Batch: 183069, 183087, 183106, 183108, 183065, 183068, 183078, 183155

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT

Test	Sample Result	Spike Added	Matrix Spike	Matrix Spike Dup	%Rec MS	%Rec MSD	% RPD
As	0.027	1	0.96	0.95	93	92	1
Se	0.108	1	1.00	0.99	89	88	1
Tl *	ND	1	0.54	0.55	54	55	2
Pb	0.005	1	0.90	0.89	90	89	1
Sb	ND	1	1.09	1.08	109	108	1
Ba	0.079	1	1.01	1.06	93	98	5
Be	ND	1	1.01	1.02	101	102	1
Cd	ND	1	0.94	0.98	94	98	4
Cr	0.009	1	0.93	0.96	92	95	3
Co	ND	1	0.89	0.92	89	92	3
Cu	0.014	1	0.90	0.95	89	94	5
Mo	0.026	1	1.03	1.04	100	101	1
Ni	ND	1	0.87	0.89	87	89	2
Ag *	ND	1	0.35	0.35	70	70	0
V	ND	1	0.94	0.99	94	99	5
Zn	0.247	1	1.13	1.18	88	93	4
Al	0.011	1	0.86	0.89	85	88	3
Mn	ND	1	0.89	0.92	89	92	3
B	0.219	1	1.12	1.17	90	95	4
Fe *	0.654	1	1.00	1.23	35	58	21
Sr	0.676	10	11.70	11.80	110	111	1
Ti *	ND	10	17.00	16.90	170	169	1
Ca	153.000	10	171.00	170.00	NC	NC	1
Mg	45.000	10	50.40	51.10	NC	NC	1
K	3.080	10	14.00	14.30	109	112	2
Na	90.100	10	106.00	105.00	NC	NC	1

* = Outside QC limits, due to matrix interference
If Sample Result > 4 times Spike Added, then "NC"

% REC. LIMITS – 75 -125
RPD LIMITS – 20

JAN-25-2007 16:00 FROM-Associated Laboratories 714-538-1209 T-455 P.009/017 F-348

ASSOCIATED LABORATORIES
LCS REPORT FORM - METHOD 200.7 / 6010

LCS RECOVERY / METHOD BLANK

Test	LCS Result	True Value	LCS %Rec	QC Limit %REC	MB Limit	MB Result
Ag	0.97	1	97	80-120	0.005	ND
Al	2.17	2	109	80-120	0.030	ND
As	2.05	2	103	80-120	0.005	ND
B	2.23	2	112	80-120	0.050	ND
Ba	2.10	2	105	80-120	0.010	ND
Be	2.05	2	103	80-120	0.005	ND
Cd	2.06	2	103	80-120	0.005	ND
Co	2.04	2	102	80-120	0.005	ND
Cr	2.02	2	101	80-120	0.010	ND
Cu	1.94	2	97	80-120	0.010	ND
Fe	2.02	2	101	80-120	0.029	
Mn	2.05	2	103	80-120	0.010	ND
Mo	2.07	2	104	80-120	0.010	ND
Ni	2.03	2	102	80-120	0.015	ND
Pb	2.08	2	104	80-120	0.005	ND
Sb	2.34	2	117	80-120	0.006	ND
Se	2.03	2	102	80-120	0.006	ND
Tl	2.03	2	102	80-120	0.005	ND
V	2.02	2	101	80-120	0.005	ND
Zn	2.08	2	104	80-120	0.010	ND
Sr	1.90	2	95	80-120	0.010	ND
Ti	2.03	2	102	80-120	0.010	ND
Ca	105.00	100	105	80-120	0.100	ND
Mg	103.00	100	103	80-120	0.100	ND
K	104.00	100	104	80-120	0.500	ND
Na	107.00	100	107	80-120	0.100	ND

ASSOCIATED LABORATORIES
LCS REPORT FORM

QC Sample: LCS/LCSD

Matrix: WATER

Extraction Method : 3510C

Prep. Date: January 17, 2007

Analysis Date January 17, 2007

Lab ID#'s in Batch: 183055, 183068

LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT

Reporting Units = mg/L

Test	Method	Method Blank	Spike Added	LCS Spike	LCSD Spk. Dup	%Rec LCS	%Rec LCSD	RPD
DIESEL	8015D	ND	1	0.78	0.97	78	97	22

ND = Not Detected
LCS Result = Lab Control Sample Result
%REC-LCS & LCSD = Percent Recovery of LCS Spike & LCS Spike Duplicate
RPD = Relative Percent Difference of LCS Spike and LCS Spike Duplicate

%REC LIMITS - 70 - 130
RPD LIMITS = 30

SURROGATE RECOVERY

Sample No.	O-Terphenyl
QC Limit	55-200
Method Blank	130
LCS	150
LCSD	190

ASSOCIATED LABORATORIES
LCS REPORT FORM

QC Sample: G1S-LCS&LCSD

Matrix: WATER

Prep. Date: January 17, 2007

Analysis Date January 17, 2007

Lab ID#'s in Batch: 183183, 183155, 183068, 183055, 182936

LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT

Reporting Units = µg/L

Test	Method	Method Blank	Spike Added	LCS Spike	LCSD Spk. Dup	%Rec LCS	%Rec LCSD	RPD
TPH	8015M-G	ND	500	425	415	85	83	2

ND = Not Detected
LCS Result = Lab Control Sample Result
%REC-LCS & LCSD = Percent Recovery of LCS Spike & LCS Spike Duplicate
RPD = Relative Percent Difference of LCS Spike and LCS Spike Duplicate

%REC LIMITS - 70 - 130
RPD LIMITS = 30

SURROGATE RECOVERY

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	93
LCS	140
LCSD	129

AAA-TFT = a,a,a-Trifluorotoluene

ASSOCIATED LABORATORIES
LCS REPORT FORM

QC Sample: G2-LCS&LCSD

Matrix: WATER

Prep. Date: January 17, 2007

Analysis Date January 17, 2007

Lab ID#'s in Batch: 183138, 183120, 183068, 183123,

LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT

Reporting Units = µg/L

Test	Method	Method Blank	Spike Added	LCS Spike	LCSD Spk. Dup	%Rec LCS	%Rec LCSD	RPD
TPH	8015M-G	ND	500	463	469	93	94	1

ND = Not Detected
LCS Result = Lab Control Sample Result
%REC-LCS & LCSD = Percent Recovery of LCS Spike & LCS Spike Duplicate
RPD = Relative Percent Difference of LCS Spike and LCS Spike Duplicate

%REC LIMITS = 70 - 130
RPD LIMITS = 30

SURROGATE RECOVERY

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	110
LCS	100
LCSD	117

AAA-TFT = a,a,a-Trifluorotoluene

JAN-25-2007 16:01 FROM-Associated Laboratories 714-538-1209 T-455 P.013/017 F-348

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

SAMPLE ACCEPTANCE CHECKLIST

Section 1
Client: The Reynolds Project: _____
Date Received: 1/16/07
Sample(s) received in cooler: (Yes) No (Skip Section 2)

Section 2
Was the cooler packed with: ✓ Ice ___ Ice Packs ___ Bubble Wrap ___ Styrofoam
___ Paper ___ None ___ Other _____
Cooler or box temperature: 3.2°C

(Acceptance range is 2 to 6 Deg. C.)

Section 3	YES	NO	N/A
Was a COC received?			✓
Were custody seals present?	✓		
If Yes – were they intact?	✓		
Were all samples sealed in plastic bags?	✓		
Did all samples arrive intact? If no, indicate below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were correct containers used for the tests required?	✓		
Was a sufficient amount of sample sent for tests indicated?	✓		
No head space in VOA vials?	✓		
Were the correct preservatives used?			✓
Were the samples scanned for presence of radioactivity?			✓
Was total residual chlorine measured (Fish Bioassay samples only)? *			

Not enough for an Effluent ID: FB

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

Section 4
Explanations/Comments

Section 5
Was Project Manager notified of discrepancies: Y / N (N/A)

Completed By: _____ Date: 1/16/07

JAN-25-2007 16:01 FROM-Associated Laboratories 714-538-1209 T-455 P.017/017 F-348

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868
714/771-6900 FAX 714/538-1209

CHAIN OF CUSTODY RECORD

Date 1/15/07 Page 2 of 2

Assigned LR# 18306

CLIENT: The Reynolds Group

ADDRESS: 100 E San Marcos Blvd #410
San Marcos CA 92069

Is this the address the final report is to be sent to? Yes X No ___
If "No" list mailing address in "Special Instructions" section at the bottom of this Chain of Custody.

CONTACT PERSON: Gwen Tellegen

SAMPLED BY (Circle One): (Client) Assoc. Lab Personnel

PROJECT IDENTIFICATION/LOCATION: Emeryville Properties LLC

PURCHASE ORDER #: 7124

SAMPLER: (Print AND Sign) Gwen Tellegen

PHONE #: (949) 728-8448

FAX #: (949) 760 510-2377

SAMPLE TURNAROUND TIME:

Requested Turnaround Time (CIRCLE ONE)*
Priority Charges Apply to Rush Turn Around Times
RUSH: ___ Same Day 24 Hr 48 Hr 72 Hr
(STANDARD:) Standard TAT **(5 to 10 Working Days)
Other ___

* Availability of Same Day/24/48/72 Hr TAT Varies Based Upon Test Method Requirements.
**Standard TAT Varies According to Analyses.

SAMPLE CONDITION INFO - *FOR LAB USE ONLY:*
Samples Intact: Yes ✓ No ___
Sample Seals Intact: Yes ___ No ___ N/A ✓
Cooler Seals Intact: Yes ___ No ___ N/A ✓

	SAMPLE ID	SAMPLE OR LOCATION DESCRIPTION	DATE	TIME	MATRIX (See Codes Below)	# OF CONTAINERS	TEST REQUIRED
1	TB	Trip Blank	1/15/07	1000	W	2 VOAs	8260 BTEX oxygenates 8015 gas
2	FB	Field Blank	1/15/07	1025	W	5 VOAs	8260 BTEX oxygenates 8015 gas
3	FB	Field Blank	1/15/07	1035	W	1-Lite Amber	8015 Diesel
4	FB	Field Blank	1/15/07	1025	W	1 250ml plastic	Total Lead
5	MW-1	Emeryville Monitoring Well #4	1/15/07	1055	GW	1-LAmber	8015 Diesel
6	MW-1		1/15/07	1055	GW	1 250ml plastic	Total Lead
7	MW-1 (MW-4)	↓ ↓ Well #4	1/15/07	1055	GW	5-VOAs	8260 BTEX oxygenates 8015 gas
8							
9							
10							

MATRIX: GW=Ground Water DW=Drinking Water WW=Waste Water SW=Storm Water S=Solid/Soil A=Air L=Liquid F=Food (Use the codes shown here to identify the matrix above)

Relinquished by: (Print AND Sign)*** Gwen Tellegen	Received By: (Print AND Sign) Juan Montano 1040	Date/Time: 1/15/07 5PM
Relinquished by: (Print AND Sign)***	Received By: (Print AND Sign)	Date Time:
Relinquished by: (Print AND Sign)***	Received by Lab for Analysis: (Print AND Sign)	Date Time

***By signing this Chain of Custody you are authorizing the analyses shown above. (Print AND Sign)

Special Instructions:

COC DISTRIBUTION:
White with report. Yellow to AL Pink to Client's Courier

JAN-25-2007 16:01 FROM-Associated Laboratories 714-538-1209 T-455 P.016/017 F-348

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868
714/771-6900 FAX 714/538-1209

CHAIN OF CUSTODY RECORD

Date 1/15/07 Page 1 of 2

Assigned LR# 183068

CLIENT: The Reynolds Group
ADDRESS: 100 E San Marcos Blvd #400
San Marcos CA 92069

Is this the address the final report is to be sent to? Yes X No ___
If "No" list mailing address in "Special Instructions" section at the bottom of this Chain of Custody.

CONTACT PERSON: Gwen Tellega
SAMPLED BY (Circle One): (Client) Assoc. Lab Personnel

PROJECT IDENTIFICATION/LOCATION: EMERYVILLE PROPS LLC
PURCHASE ORDER #: Proj 71163
SAMPLER: (Print AND Sign) Gwen Tellega

PHONE #: (949) 378-8948
FAX #: (760) 510-2377

SAMPLE TURNAROUND TIME:
Requested Turnaround Time (CIRCLE ONE)*
Priority Charges Apply to Rush Turn Around Times
RUSH: ~~Same~~ Day 24 Hr 48 Hr 72 Hr
STANDARD: Standard TAT **(5 to 10 Working Days)
Other ___
* Availability of Same Day/24/48/72 Hr TAT Varies Based Upon Test Method Requirements.
**Standard TAT Varies According to Analyses.

SAMPLE CONDITION INFO - *FOR LAB USE ONLY*:
Samples Intact: Yes ✓ No ___
Sample Seals Intact: Yes ___ No ___ N/A ✓
Cooler Seals Intact: Yes ___ No ___ N/A ___

	SAMPLE ID	SAMPLE OR LOCATION DESCRIPTION	DATE	TIME	MATRIX (See Codes Below)	# OF CONTAINERS	TEST REQUIRED
1	MW-2	Emeryville Monitoring Well 2	1/15/07	9:10 am	GW	1-L-amber	8015 Diesel
2	MW-2	" "	1/15/07	9:10 am	GW	1-250ml plastic	Total Lead
3	MW-2	" "	1/15/07	9:10 am	GW	5-VOAs	8260 BTEX Oxygenates 8015 Gasoline
4	MW-1	Emeryville Monitoring Well 1	1/15/07	10:00 AM	GW	1-L Amber	8015 Diesel
5	MW-1	" Monitoring Well	1/15/07	10:00	GW	1-250ml plastic	Total Lead
6	MW-1	" "	1/15/07	10:00	GW	5-VOAs	8260 BTEX Oxygenate 8015 Gasoline
7	MW-X	Emeryville Monitoring Well X	1/15/07	10:02	GW	1-L amber	8015 Diesel
8	MW-X	" "	1/15/07	10:02	GW	1-250ml plastic	Total Lead
9	MW-X	" "	1/15/07	10:02	GW	5-VOAs	8260 BTEX Oxygenate 8015 Gasoline
10	next page						

MATRIX: GW=Ground Water DW=Drinking Water WW=Waste Water SW=Storm Water S=Solid/Soil A=Air L=Liquid F=Food (Use the codes shown here to identify the matrix above)

Relinquished by: (Print AND Sign)***	Received By: (Print AND Sign)	Date/Time
Gwen Tellega	Juan Montoya	1/16/07 10:40
Relinquished by: (Print AND Sign)	Received By: (Print AND Sign)	Date/Time:
Relinquished by: (Print AND Sign)***	Received by Lab for Analysis (Print AND Sign)	Date/Time:

***By signing this Chain of Custody you are authorizing the analyses shown above. (Print AND Sign)

Special Instructions:

COC DISTRIBUTION: White with report Yellow to AL Pink to Client's Courier

1-16-07 11:20

JAN-25-2007 16:01 FROM-Associated Laboratories 714-538-1209 T-455 P.015/017 F-348

ASSOCIATED LABORATORIES

QA / QC EPA Methods 8260 - GCMS # 3

Sample ID: *MS/MSD Water Sample* 183068-936
Date Prepared: January 19, 2007
Date Analyzed: January 21, 2007
Sample Matrix: Water
Units: µg/L

Lab ID#'s in Batch: 183068, 183210, 183123, 183173

Compound	Sample Conc.	Spike Added	Spike Res	Dup Res	Spike % Rec	Dup % Rec	RPD	QC RPD	Limits % Rec
1,1-Dichloroethene	0.00	50.0	50.60	51.60	101	103	2	22	59 - 172
MTBE	0.00	50.0	49.60	50.50	99	101	2	24	62 - 137
Benzene	0.00	50.0	49.20	52.00	98	104	6	24	62 - 137
Trichloroethene	3.40	50.0	51.90	52.60	97	98	1	21	66 - 142
Toluene	0.00	50.0	49.60	49.70	99	99	0	21	59 - 139
Chlorobenzene	0.00	50.0	49.00	48.70	98	97	1	21	60 - 133

Sample ID: *LCS*

Compound	Spike Added	Spike Res	Spike % Rec	Limits % Rec
1,1-Dichloroethene	50.0	46.40	93	59 - 172
MTBE	50.0	48.10	96	62 - 137
Benzene	50.0	48.20	96	62 - 137
Trichloroethene	50.0	47.60	95	66 - 142
Toluene	50.0	48.30	97	59 - 139
Chlorobenzene	50.0	48.20	96	60 - 133

*=Outside QC limits due to high concentration in sample

If Sample Result > 4 times Spike Added, then "NC"

Surrogate Recovery

Compound	MB 1 % Rec	MB 2 % Rec		MS % Rec	MSD % Rec		LCS % Rec	Limits % Rec
Dibromofluoromethane	89			96	97		98	70 - 135
1,2-Dichloroethane-d4	104			95	96		93	70 - 135
Toluene-d8	102			103	103		102	70 - 135
p-Bromofluorobenzene	107			99	101		96	70 - 135

JAN-25-2007 16:01 FROM-Associated Laboratories 714-538-1209 T-455 P.014/017 F-348

APPENDIX B

Standard Operating Procedures

THE REYNOLDS GROUP -STANDARD OPERATING PROCEDURE

GROUNDWATER WELL DEVELOPMENT

SCOPE OF WORK

Monitoring well development establishes a complete hydraulic connection between the well and the aquifer material surrounding the well screen and filter pack. Monitoring wells will be measured and developed according to the TRG Well Development Standard Operating Procedure described below. The Well Development SOP consists of Field Preparation, Well Development and Decontamination Procedures.

Field Preparations include the following:

1. Review of Health and Safety Plan (HASP), especially required PPE and hospital route map
2. Discuss field procedures and requirements with project team/ development contractor
3. Completion of the Field Prep Checklist (See Attached)
4. Obtain all required development equipment – IF THE DEVELOPMENT EQUIPMENT IS PROVIDED BY THE SUBCONTRATOR BE SURE TO CALIBRATE IT IN THE OFFICE BEFORE FIELD WORK
    - PPE (Tyvec, booties, gloves, hardhat, steel toe boots)
    - Proper instruments to measure specific conductivity, temperature, and pH
    - Turbidimeter
    - PID/ FID
    - Plastic
    - Paper towels
    - Camera
    - Trash bags
    - Surge block
    - Submersible pump

Well Development Procedures include the following:

1. Most wells are developed by using surge block and submersible pumping methods to draw the coarse and/or fine material out of the sand pack.

2. Well development should begin no sooner than 72 hours after well installation. However, if drilling muds are used during well installation, well development should occur approximately 24 hours following well installation so that the drilling mud does not set up in well screen section. A phased process is used to develop wells, starting with a gentle pumping or bailing phase to remove sand, followed by a surging phase, and then a pumping phase after the well begins to clear up. Step by step procedures are described as follows:

a. At the time of installation, immediately after the well completion, gentle pumping is used to remove water and sand from the well. The purpose of this technique is used to settle the sand pack with the borehole.

b. Approximately 72 hours after well installation, bailing or pumping for well development can begin. The initial bailing removes sand and fine material that may have accumulated in the well, and pulls in natural material into the sand pack. To determine the amount of sediment in the well, the total well depth should be measured and compared to the well installation boring log depth. The difference between measured depth and installed depth represents the amount of sediment in the well. Bailing or pumping is conducted until the sand content in the water begins to decrease and the measured depth approaches the total well depth.

c. After the sand content begins to decrease, surging is conducted. A surge block is used to move sediments from the filter pack into the well casing. A surge block consists of a plunger attached to a rod or pipe of sufficient length to reach bottom of the well. All surge blocks are made of inert materials that cannot contaminate the well. Surge blocks should release pressure to prevent casing collapse. Care should be taken to not surge too strongly which could result in casing collapse or deformation. The surge block is moved up and down the well screen interval and then removed, followed by a return to bailing or pumping to remove any sand brought into the well by the surging action.

d. After surging has been completed and the sand content of the bailed water has decreased, as determined by another well depth measurement, a submersible pump is used to continue well development. The pump should be moved up and down the well screen interval until the obtained water is relatively clear. During well development pH, specific conductivity, temperature, and turbidity should be monitored frequently (every 2-5 minutes) to establish natural conditions and evaluate whether the well has been completely developed. The primary criteria used to determine the completion of well development is the clearness of the groundwater (Nephelometric Turbidity Units or NTU). Before ceasing well development activities a turbidity of less than 5 NTU should be attained. Any well with turbidity greater than 5 NTU after development is considered to be suspect in integrity by the State of California.

i. Development will conclude when at least 3 well bore volumes are removed, the water clarifies, and water quality parameters have stabilized within 10% for three successive readings. The final three readings collect should conform to the following readings:
pH +/- 0.1 unit
electrical conductance (EC) +/- 3%

A copy of The Reynolds Group Well Development log form is attached. These parameters as well as time, depth to water, total volume pumped, temperature should be recorded on this form.

The volume of water purged from the well during development will be a minimum of 3 borehole volumes (wells will typically not reach stabilization of water quality parameters before this condition is achieved and may not have reached stability even after this threshold has been achieved). A copy of The Reynolds Group well volume calculation form is attached. Greater volumes may be required if the measured water quality parameters do not stabilize to the stated criteria.

THE REYNOLDS GROUP -STANDARD OPERATING PROCEDURE

LOW FLOW GROUNDWATER MONITORING

SCOPE OF WORK

Monitoring wells will be measured, purged, and sampled according to the TRG Well Monitoring Low Flow Groundwater Monitoring Standard Operating Procedure described below. The Groundwater Monitoring SOP consists of Field Preparation, Sampling Procedures, and Decontamination Procedures sections.

Field Preparations include the following:

1. Review of Health and Safety Plan (HASP), especially required PPE and hospital route map
2. Discuss field procedures and requirements with project team
3. Completion of the Field Prep Checklist (See Attached)
4. Obtain all required sampling equipment – IF THE SAMPLING EQUIPMENT IS RENTED BE SURE TO TRY USE AND CALIBRATION IN THE OFFICE BEFORE FIELD WORK
    - PPE (Tyvec, booties, gloves, hardhat, steel toe boots)
    - Dedicated tubing
    - Low flow pump
    - In-line Flow Cell to measure DO, ORP, Temperature, and pH
    - Turbidimeter
    - PID/ FID
    - Plastic
    - Paper towels
    - Ziplock bags
    - Cooler
    - Ice
    - Disposable bailers
    - Twine
    - Camera
    - Trash bags

5. Review site specific monitoring procedure, which will include the following:
    a. Removal of any dedicated tubing from each well before purging and sampling, safely placing it in a clean area in separate clean trash bags.
    b. Purging water from wells using a low flow pump connected to a Flow Cell (removing at least 3 casing volumes or until all parameters stabilize-see below)
    c. Measuring water quality parameters during purging on attached monitoring form

d. Sampling the well using a disposable bailer or from the low flow pump discharge hose (before the Flow cell)
e. Re-inserting the dedicated tubing after sampling.

6. Obtain sample containers for required analysis
   a. The two wells will be sampled for:
      - Filtered CAM Metals by EPA Method 6010
      - Hex Chromium by EPA Method 7199 (24 hour hold time)
      - Nitrates (48 hour hold time)
      - Sulfates by EPA Method 300
      - The laboratory will filter ONLY the samples for dissolved metals
      - From each well the samples will be collected in two 1 Liter polyethylene bottles with no preservatives

Sampling Procedures include the following:

1. Arrive at Site and conduct tailgate meeting discussing HASP.
2. Don proper PPE, which will consist of a tyvex uniform with booties and gloves for each technician, and carefully open each well and remove the dedicated tubing, placing it in separate clean trash bags.
3. Measure the total depth and depth to water of each well to the nearest one-tenth of a foot using a sounder, properly decontaminating (see Section below) the instrument between each well.
4. Place visqueen around each well while noting and recording the condition of well lids, caps, seals, and casing. IF THE WELLS ARE NOT LABELED, A PERMANENT MARKER OR PAINT PEN SHOULD BE USED TO MARK THE TOPAND UNDERSIDE OF THE WELL CAP, as well as the casing.
5. Properly decontaminate the low flow pump prior to purging of each well (see Decontamination Procedure).
6. Cut appropriate length of tubing for each well (total well depth minus two ft.)
7. Calibrate all instruments (Flow Cell, FID, and Turbidimeter) being used to collect parameters or monitor air quality during the purge and sample process. This must be done before the start of EVERY day, and if readings seem to drift during the monitoring, the instrument should be recalibrated.
8. Calculate three well volumes for each well (see Attached Spreadsheet).

9. **Purging Wells** – minimize spillage during pumping by having extra drums in the well area
   a. Each well will be purged to extract three boring volumes while measuring and recording on to two minute intervals for temperature, conductivity, pH, turbidity, and dissolved oxygen.

b. Purging will conclude after three volumes are removed, or when the water quality parameters have stabilized within 10% for three successive readings.

pH +/- 0.1
specific electrical conductance (SEC) +/- 3%
oxidation-reduction potential (ORP) +/- 10 millivolts
turbidity +/- 10% (when turbidity is greater than 5 NTUs)
dissolved oxygen (DO) +/- 0.3 milligrams per liter

7. Monitor and record water levels during purging. Adjust pump flow levels so that water levels do not fluctuate more than 10% of total water column and do not cause aeration.
8. All purged water will be contained in properly labeled drums for characterization and proper disposal.
9. **Sampling Wells** - will be carried out once water quality parameters have stabilized.
   a. Sampling will be performed either from the discharge line of the low flow pump (before the Flow Cell) or from disposable bailers lowered slowly with twine (new twine will be used for each well) approximately two ft. below the water surface.
   b. Sample bottles, will be labeled with well name, date, time sampled, and constituents to be analyzed.
      i. Each well will be sampled using the required number of bottles
      ii. A field blank sample will be taken by running distilled water through the sampling equipment into sample bottles and will be labeled FB.
      iii. A trip blank sample will be taken using distilled water to fill the bottle set and labeled TB
      iv. A duplicate sample will be taken will be taken by taking separate samples from the same well and labeled MW-X.
   c. Sample bottles will be placed into buckets while sampling to ensure no spillage of water onto the sidewalk or street.
   d. Sample bottles will be rinsed with sample water that is discarded before sampling.
   e. Water retrieved from each well will be deposited into bottles by opening the check valve at the bottom of the disposable bailer allowing water to slowly fill to the top of the rims minimizing spillage, agitation, and aeration.
   f. Bailers will be placed back into the bags in which they came and placed into drums for proper disposal.
   g. The sample bottles from each well will be put into separate ziplock bags to ensure no cross contamination.
   h. Samples will be kept on ice in coolers and chilled to 4 degrees C.
10. Following the collection of each sample, a chain of custody will be properly completed showing sample identification, date, time of sample, matrix, number of containers, and tests required.
11. Any dedicated micro-purge tubing will be carefully re-installed into wells, ensuring no contact with the ground surface.

12. All persons involved in purging and sampling will remove and dispose of PPE in a properly labeled drum.
13. All equipment will be decontaminated and placed in special storage containers.
14. A state certified laboratory will arrive onsite to receive all samples and chain of custody.

Decontamination Procedures include the following:

1. Once removed from the well, the purging and sampling pumps should be decontaminated with a non-phosphate soapy-water wash and scrubbed with a brush, a water rinse, and a distilled-water rinse, to help ensure that there is no cross-contamination between wells.
2. The step-by-step procedure is:
    a. Pull pump out of previously-sampled well (or out of vehicle) and use three sprayers filled with soapy water, tap water and distilled water. Spray outside of tubing and pump until water is flowing off of tubing after each rinse. Use bristle brush to help remove visible dirt, contaminants, etc.
    b. Have three long-PVC tubes with caps or buckets filled with soapy water, tap water and distilled water. Run pump in each until approximately 2 to 3 gallons of each decon solution is pumped through tubing. Pump at low rate to increase contact time between the decon solutions and the tubing.
    c. Prior to lowering the pump down the next well, spray the outside of the pump with distilled water. Use disposable paper towels and dry the pump.
    f. It is especially important to clean thoroughly that portion of the equipment that will be in contact with sample water. In addition, a clean plastic sheet should be placed adjacent to or around the well to prevent surface soils from coming in contact with the purging equipment. The effects of cross-contamination also can be minimized by sampling the least contaminated well first and progressing to the more contaminated ones. The bailer cable/rope (if a bailer is used) and plastic sheet should be properly discarded, as provided in the site health and safety plan, and new materials provided for the next well.
    g. Dedicated tubing will be used and disposed of after each well is sampled.

APPENDIX C

Field Data Sheets

TRG

WELL DEVELOPMENT LOG

Well Number: MW-1

Client: Emeryville Properties

Job No: 7103

Location: 1400 Park Ave, Emeryville, CA

Sample Time:

Rep: Sean Boykin

Sample #:

DEVELOPMENT/PURGING LOG

DTB = 23.23
DTW = 8.10

DATE	TIME	DTFP (0.01) ft.	DTW (0.01) ft.	DTB (0.01) ft.	Vol. Purged (Gal)	pH	Temp °F	EC µ mhos	Turbidity Color
	1200				3	7.1	19.9	.573	210
	1202		8.22		6	6.8	20.0	.579	>1000
	1204				9	6.7	20.1	.567	600
	1206		8.33		12	6.6	20.1	.576	320
	1208				15	6.5	20.1	.579	230
	1210		8.55		18	6.6	19.9	.590	95
	1212				21	6.6	20.0	.593	50
	1214		8.55		24	6.6	20.0	.595	30
	1216				27	6.6	20.0	.596	19
	1218		8.57		30	6.5	20.0	.596	14
	1220				33	6.5	19.9	.596	10
	1222				36	6.5	20.0	.598	8.6
	1224		8.55		39	6.5	20.0	.598	7.1
	1226				42	6.5	19.9	.599	6.0

Well Volume Calculations

41 gal. 23.23 − 8.10

• Water Column (ft)	(WCH)	DTB-DTW	
• Casing Diameter		2", 4"	2
• Casing capacity(gal/ft)	(CK)	2"(.16), 4"(.65)	.16
• Casing WC Volume (gal)	(CV)	(CK) (WCH)	
• Borehole Diameter		6", 8", 10"	10"
• Borehole Capacity (gal/ft)	(BK)	6"(1.46), 8"(2.6), 10" (4.1)	4.1
• Borehole WC Volume (gal)	(BV)	(BK) (WCH)	
• Porosity	(N)	Sand (.3)	.3
• Annulus WC Volume (gal)	(AV)	(BV-CV) (N)	
• Total Well Volume (gal)	(TV)	CV + AV	
• Min. Development Vol. (gal)	(DV)	(1.5) (TV)	
• LPH Thickness (ft)	(Well)	DTW-DTFP	0

Recovery Calculations 8.10

• Bailer/Pump Type	
• Pump Rate (gpm)	
• DTW Before Purging (ft)	
• DTW After Purging (ft)	
• Recovery Time After 80% WC Recharge (min)	
• Recovery Time To Static Water Level (min)	
• Recharge Rate (ft/min)	
• Comments	

TRG

WELL DEVELOPMENT LOG

Well Number: MW-1

Client: Emeryville Properties

Job No: 7103

Location: 1400 Park Ave., Emeryville, CA

Sample Time:

Rep: Sean Boykk

Sample #:

DEVELOPMENT/PURGING LOG

DATE	TIME	DTFP (0.01) ft.	DTW (0.01) ft.	DTB (0.01) ft.	Vol. Purged (Gal)	pH	Temp °F	EC µ mhos	Turbidity Color
	1228		8.55		45	6.6	19.9	.599	5.5
	1230				48	6.5	19.9	.598	4.8
	1232		8.55		51	6.6	20.0	.599	4.8
	1234				54	6.5	20.1	.596	4.0
			Final Depth To Water = 8.10						

Well Volume Calculations

8.10

• Water Column (ft)	(WCH)	DTB-DTW	
• Casing Diameter		2", 4"	4"
• Casing capacity(gal/ft)	(CK)	2"(.16), 4"(.65)	.65
• Casing WC Volume (gal)	(CV)	(CK) (WCH)	
• Borehole Diameter		6", 8", 10"	10"
• Borehole Capacity (gal/ft)	(BK)	6"(1.46), 8"(2.6), 10" (4.1)	4.1
• Borehole WC Volume (gal)	(BV)	(BK) (WCH)	
• Porosity	(N)	Sand (.3)	.3
• Annulus WC Volume (gal)	(AV)	(BV-CV) (N)	
• Total Well Volume (gal)	(TV)	CV + AV	
• Min. Development Vol. (gal)	(DV)	(1.5) (TV)	
• LPH Thickness (ft)	(Well)	DTW-DTFP	0

Recovery Calculations

• Bailer/Pump Type	
• Pump Rate (gpm)	
• DTW Before Purging (ft)	
• DTW After Purging (ft)	
• Recovery Time After 80% WC Recharge (min)	
• Recovery Time To Static Water Level (min)	
• Recharge Rate (ft/min)	
• Comments	

TRG

WELL DEVELOPMENT LOG

Well Number: MW-2

Client: Emeryville Properties

Job No: 7103

Location: 1400 Park Ave., Emeryville, CA

Sample Time:

Rep: Sean Boykin

Sample #:

DEVELOPMENT/PURGING LOG

DTB = 23.17
DTW = 5.52

DATE	TIME	DTFP (0.01) ft.	DTW (0.01) ft.	DTB (0.01) ft.	Vol. Purged (Gal)	pH	Temp °F/C	EC mS µ mhos	Turbidity Color
	815				3	5.8	40.6	.508	999
	817		5.82		7	6.1	37.2	.473	999
	819				11	6.3	40.4	.449	999
	821				15	6.4	32.5	.552	999
	823		9.57		19	6.5	33.1	.512	866
	825				23	6.6	40.1	.470	660
	827		9.55		27	6.6	34.0	.512	393
	829				31	6.6	33.7	.508	497
	831		9.31		34	6.6	31.1	.364	380
	833				38	6.6	33.9	.527	236
	835		9.16		41	6.6	36.0	.492	134
	837				44	6.6	29.3	.612	32
	839		9.16		47	6.6	24.9	.602	4
	841				48	6.7	22.0	.601	3
	843				51	6.7	22.1	.601	3

Well Volume Calculations

23.17 - 5.52
23.19

• Water Column (ft)	(WCH)	DTB-DTW	
• Casing Diameter		2", 4"	2
• Casing capacity(gal/ft)	(CK)	2"(.16), 4"(.65)	.16
• Casing WC Volume (gal)	(CV)	(CK) (WCH)	
• Borehole Diameter		6", 8", 10"	10"
• Borehole Capacity (gal/ft)	(BK)	6"(1.46), 8"(2.6), 10" (4.1)	4.1
• Borehole WC Volume (gal)	(BV)	(BK) (WCH)	
• Porosity	(N)	Sand (.3)	.3
• Annulus WC Volume (gal)	(AV)	(BV-CV) (N)	
• Total Well Volume (gal)	(TV)	CV + AV	
• Min. Development Vol. (gal)	(DV)	(1.5) (TV)	
• LPH Thickness (ft)	(Well)	DTW-DTFP	0

Recovery Calculations

Final DTW → 5.55

• Bailer/Pump Type	
• Pump Rate (gpm)	
• DTW Before Purging (ft)	
• DTW After Purging (ft)	
• Recovery Time After 80% WC Recharge (min)	
• Recovery Time To Static Water Level (min)	
• Recharge Rate (ft/min)	
• Comments	

TRG

WELL DEVELOPMENT LOG

Well Number: MW-4

Client: Emeryville Properties

Job No: 7103

Location: 1400 Park Ave., Emeryville, CA

Sample Time:

Rep: Sean Boykin

Sample #:

DEVELOPMENT/PURGING LOG

DTB = 19.91
DTW = 4.55

DATE	TIME	DTFP (0.01) ft.	DTW (0.01) ft.	DTB (0.01) ft.	Vol. Purged (Gal)	pH	Temp °C	EC mS/cmhos	Turbidity Color
~~1010~~	1010		5.10		3	7.0	18.6	.519	>1000
	1012				6	6.8	21.8	.501	>1000
	1014		9.60		9	6.8	22.2	.556	>1000
	1016				12	6.6	22.4	.675	>1000
	1019		9.59		15	6.7	19.4	.694	>1000
	1021				18	6.7	19.7	.735	>1000
	1023		9.60		21	6.8	19.9	.751	>1000
	1025				24	6.8	21.5	.744	>1000
	1027		9.58		27	6.8	21.6	.772	310
	1029				30	6.8	25.7	.728	160
	1031		9.58		33	6.8	21.0	.761	75
	1034				36	6.9	23.6	.760	38
	1036		9.58		39	6.9	24.2	.755	60
	1039				42	6.9	23.8	.755	50

Well Volume Calculations

19.91 − 4.55
~~23.17 − 5~~

• Water Column (ft)	(WCH)	DTB-DTW	
• Casing Diameter		2", 4"	2
• Casing capacity(gal/ft)	(CK)	2"(.16), 4"(.65)	.16
• Casing WC Volume (gal)	(CV)	(CK) (WCH)	
• Borehole Diameter		6", 8", 10"	10"
• Borehole Capacity (gal/ft)	(BK)	6"(1.46), 8"(2.6), 10" (4.1)	4.1
• Borehole WC Volume (gal)	(BV)	(BK) (WCH)	
• Porosity	(N)	Sand (.3)	.3
• Annulus WC Volume (gal)	(AV)	(BV-CV) (N)	
• Total Well Volume (gal)	(TV)	CV + AV	
• Min. Development Vol. (gal)	(DV)	(1.5) (TV)	
• LPH Thickness (ft)	(Well)	DTW-DTFP	0

Recovery Calculations

• Bailer/Pump Type	
• Pump Rate (gpm)	
• DTW Before Purging (ft)	
• DTW After Purging (ft)	
• Recovery Time After 80% WC Recharge (min)	
• Recovery Time To Static Water Level (min)	
• Recharge Rate (ft/min)	
• Comments	

TRG

WELL DEVELOPMENT LOG

Well Number: MW-4

Client: Emeryville Properties

Job No: 7103

Location: 1400 Park Ave, Emeryville, CA

Sample Time:

Rep: Sean Boykin

Sample #:

DEVELOPMENT/PURGING LOG

DATE	TIME	DTFP (0.01) ft.	DTW (0.01) ft.	DTB (0.01) ft.	Vol. Purged (Gal)	pH	Temp °F	EC µ mhos	Turbidity Color
	1042		9.57		45	6.9	20.2	.825	14
	1044				48	6.9	22.9	.779	15
	1046		9.58		51	6.8	21.9	.801	4.6
	1048				54	6.8	25.8	.782	2.8
	1050				57	6.8	25.4	0.781	2.2
			Final Depth To Water = 5.34						

Well Volume Calculations DTW = 5.34

• Water Column (ft)	(WCH)	DTB-DTW	
• Casing Diameter		2", 4"	4"
• Casing capacity(gal/ft)	(CK)	2"(.16), 4"(.65)	.65
• Casing WC Volume (gal)	(CV)	(CK) (WCH)	
• Borehole Diameter		6", 8", 10"	10"
• Borehole Capacity (gal/ft)	(BK)	6"(1.46), 8"(2.6), 10" (4.1)	4.1
• Borehole WC Volume (gal)	(BV)	(BK) (WCH)	
• Porosity	(N)	Sand (.3)	.3
• Annulus WC Volume (gal)	(AV)	(BV-CV) (N)	
• Total Well Volume (gal)	(TV)	CV + AV	
• Min. Development Vol. (gal)	(DV)	(1.5) (TV)	
• LPH Thickness (ft)	(Well)	DTW-DTFP	0

Recovery Calculations

• Bailer/Pump Type	
• Pump Rate (gpm)	
• DTW Before Purging (ft)	
• DTW After Purging (ft)	
• Recovery Time After 80% WC Recharge (min)	
• Recovery Time To Static Water Level (min)	
• Recharge Rate (ft/min)	
• Comments	

WELLHEAD INSPECTION CHECKLIST

Date 1/15/07 Client Reynolds Group

Site Address 1400 Park Ave. Emeryville, CA

Job Number 070115-M1 Technician DA

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-2							X	
MW-1							X	
MW-4							X	

NOTES: MW-2: casing is too high. Apron has major cracks, is below grade MW-1: wellbox rim is damaged. MW-4: 2/2 bolts missing. Lid tab is broken. Casing is too high for cap.

WELL GAUGING DATA

Project # 070115-DA1 Date 1/15/07 Client Reynolds Group

Site Emeryville Properties 1400 Park Ave. Emeryville, CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-2	0813	2					5.65	23.02	TOC	
MW-1	0816	2					8.23	23.15	↓	
MW-4	0820	2					4.32	19.78	↓	

WELL MONITORING DATA SHEET

Project #: 070115-DA1	Client: Reynolds Group
Sampler: DA	Start Date: 1/15/07
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 23.15	Depth to Water Pre: 8.23 Post: 8.37
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: X2" Grundfos Pump 2.4 gpm Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing X3 = 7.2 New Tubing Other ____

Flow Rate: ~1 gpm Pump Depth: 17'

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL) 9	Observations	
0934	18.66	6.93	581	340	0.73	44.4	—	tan, cloudy	8.23
0937	19.21	6.71	602	101	0.23	40.7	3	clearing	8.33
0940	19.34	6.73	676	21	0.29	47.8	6	N	8.34
0943	19.37	6.72	692	11	0.53	48.4	9	"	8.35
0946	19.35	6.73	701	8	0.33	46.2	12	"	8.35
0949	19.33	6.73	705	6	0.28	44.6	15	"	8.38
0952	19.31	6.73	709	4	0.24	42.5	18	"	8.38
0955	19.33	6.73	711	3	0.24	40.4	21	"	8.37
0958	19.30	6.73	713	2	0.25	39.0	24	"	8.37

Did well dewater? Yes (No) Amount actually evacuated:

Sampling Time: 1000 Sampling Date: 1/

Sample I.D.: MW-1 Laboratory: Assoc.

Analyzed for: TPH-G BTEX MTBE TPH-D Other: see COC

Equipment Blank I.D.: @ Time Duplicate I.D.: MW-X

WELL MONITORING DATA SHEET

Project #: 070115-DA1	Client: TRC
Sampler: DA	Start Date: 1/15/09
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 23.02	Depth to Water Pre: 5.65 Post: 8.30
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: X 2" Grundfos Pump 2.8 gal Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing X New Tubing Other ____
x 3 = 8.4
Flow Rate: ~1.5 Pump Depth: 18'

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals or mL)	Observations	PTW
0848	17.79	6.72	805	217	1.00	207.6	-	tan, cloudy	7.18
00851	17.94	6.69	809	97	0.86	201.0	3	cleaning	8.28
0854	18.40	6.69	817	49	1.63	190.7	7.5	"	8.42
0857	18.34	6.70	816	44	2.27	181.1	10.5	"	8.42
0900	18.37	6.70	817	11	1.79	176.2	15	"	8.38
0903	18.34	6.70	816	4	1.17	170.9	19.5	"	8.38
0906	18.33	6.70	815	3	0.94	162.5	24	"	8.32
0909	18.40	6.69	816	2	6.79	158.7	27	"	8.30

Did well dewater? Yes (No) Amount actually evacuated: 27

Sampling Time: 0911 Sampling Date: 1/15/09

Sample I.D.: MW-2 Laboratory: Assoc.

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

WELL MONITORING DATA SHEET

Project #: 070115-DA1	Client: Reynolds Group
Sampler: DA	Start Date: 1/15/07
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 19.78	Depth to Water Pre: 4.32 Post: 8.05
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (TOC) Grade	Flow Cell Type: YSI 556

Purge Method: ~2" Grundfos Pump 2.5 gal/cv Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing x3 = 7.5 xNew Tubing Other ___

Flow Rate: ~1 gpm Pump Depth: 17'

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals or mL)	Observations	DTW
1032	17.80	6.93	945	842	0.67	61.8	—	cloudy	4.32
1035	17.94	6.93	913	~~4~~ 136	0.28	42.9	3	"	7.94
1038	18.42	6.91	963	49	0.22	36.4	6	"	8.32
1041	18.59	6.97	988	25	0.27	19.0	9	"	8.62
1044	18.87	6.96	1007	6	0.32	16.7	11	"	8.32
1047	18.87	6.96	1009	4	0.26	18.7	13	"	8.28
1050	18.86	6.92	1011	3	0.22	19.2	15	"	8.20
1053	18.90	6.97	1012	2	0.21	11.0	17	"	8.05

Did well dewater? Yes (No) Amount actually evacuated: 17

Sampling Time: Sampling Date: 1/15/07

Sample I.D.: MW-4 Laboratory: Assoc.

Analyzed for: TPH-G BTEX MTBE TPH-D Other: see COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

APPENDIX D

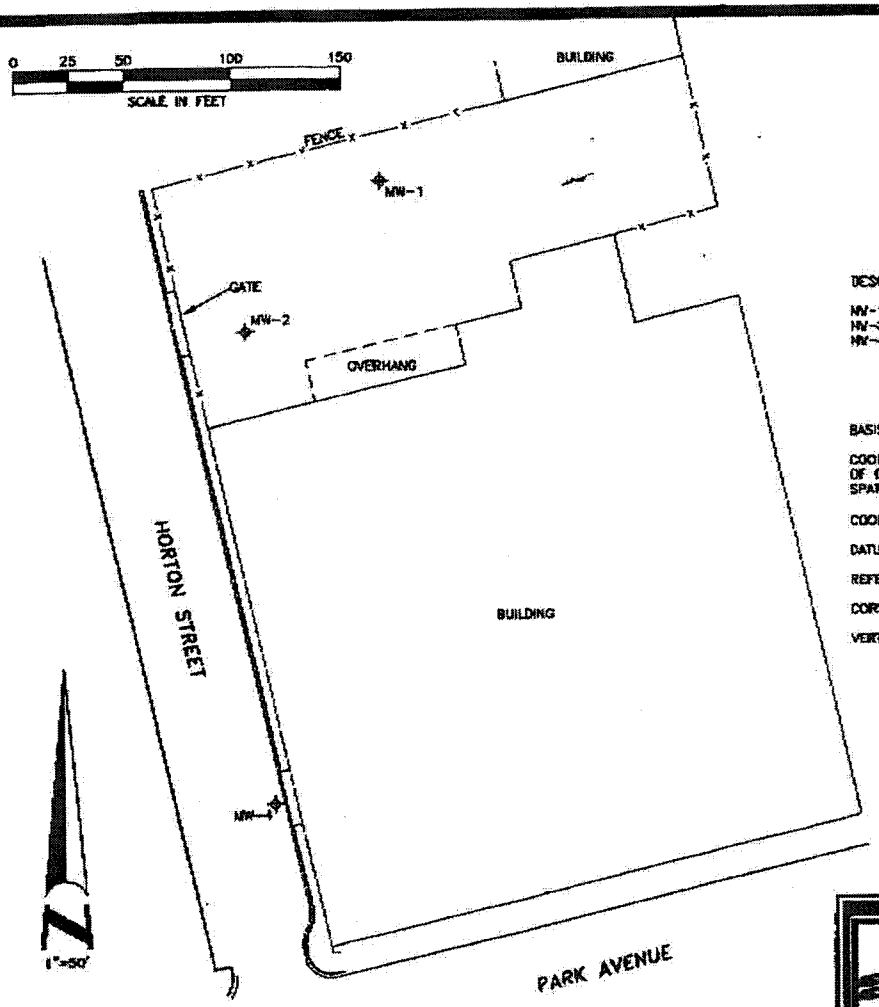
Registered Survey of Groundwater Monitoring Wells

002/002
01/11/2007 13:47 FAX 916 372 8538 MORROW SURVEYING

Monitoring Well Exhibit

Prepared For:

Reynolds Group



DESCRIPTION	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV (PVC)	ELEV (BOX)
MW-1	2130287.4	6045357.7	37.8319175	-122.2867999	19.17	19.42
MW-2	2130219.9	6045296.1	37.8317689	-122.2870089	16.43	16.64
MW-4	2130006.7	6045307.8	37.8311441	-122.2869542	14.60	14.72

BASIS OF COORDINATES AND ELEVATIONS:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING UNIVERSITY OF CALIFORNIA BAY AREA DEFORMATION CORS STATION OBSERVATION FILES AND BASED ON THE CALIFORNIA SPATIAL REFERENCE CENTER DATUM, REFERENCE EPOCH 2000.35.

COORDINATE DATUM IS NAD 83(1986).

DATUM ELLIPSOID IS GRS80.

REFERENCE GEOID IS HGS99.

CORS STATIONS USED WERE DIAB AND MHCB.

VERTICAL DATUM IS NAVD 88 FROM GPS OBSERVATIONS.

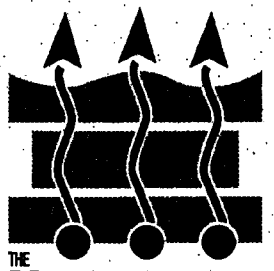
Former Chromex Facility
1400 Park Avenue
Emeryville
Alameda County
California

Morrow Surveying
LAND SURVEYORS
1450 Harbor Blvd. Ste. D
West Sacramento
California 95691
(916) 372-8124
curt@morrowsurveying.com

Date: 1-8-07
Scale: 1" = 50'
Sheet 1 of 1
Revised:
Field Book: MW-30,31
Dwg. No. 8885-001 CT

APPENDIX E

Site Specific Health and Safety Plan



HEALTH AND SAFETY PLAN

GROUNDWATER MONITORING

EMERYVILLE PROPERTIES
1400 PARK AVENUE
EMERYVILLE, California

Tel 714-730-5397

PO Box 1996, Tustin, California 92781-1996
www.reynolds-group.com

Fax 714-730-6476

INTRODUCTION

The Reynolds Group (TRG) was engaged to perform groundwater monitoring at Emeryville Properties located at 1400 Park Avenue in Emeryville, California.

KEY PERSONNEL AND RESPONSIBILITIES

Following are key assignments for this project:

ASSIGNMENT	RESPONSIBLE PARTY
Project Manager:	Gwen Tellegen/Ed Reynolds
Project Site Safety Officer:	Sean Boykin
Office Health and Safety Manager;	Gwen Tellegen

The Project Manager (PM) has overall responsibility for field development and implementation of this Health and Safety Plan (HASP). The PM assigns health and safety related duties and responsibilities only to qualified individuals. Before anyone enters the work area, they must meet the requirements of 29 CFR 110.120 for medical examination and health and safety training.

The Project Site Safety Officer (PSSO), who must be on-site during all work activities, will be responsible for on-site health and safety activities. The PSSO has stop-work authorization that he will exercise when he perceives an imminent safety hazard, an emergency situation, or any other potentially dangerous situations, such as extreme weather conditions. If the PSSO stops work for a safety-related issue, work cannot begin again until approved by the OHSM. In an emergency, the PSSO will arrange for emergency support services when needed.

GENERAL SAFETY REQUIREMENTS

Continuous air monitoring for worker safety and regulatory compliance will be conducted using a photoionization detector (PID) or flame-ionization detector (FID) a minimum of every 15 minutes during the entire operation, unless directed otherwise by the appropriate regulatory agency officer(s) present on site.

Monitoring equipment, including PID/FID and CG/O2 meter, will be calibrated daily and calibration logs will be maintained on-site and made available upon request.

All on-site personnel operating within the work zone will show proof of current 40-hour hazardous waste operations training upon request.

Cellular telephones/radios will be available on-site at all times during work for communication in the event of an emergency.

HAZARD EVALUATION

The following is an evaluation of the hazards which might be associated with this project and the countermeasures which should be taken to remediate these hazards:

Exposure

POTENTIAL CHEMICALS:

The most likely chemical compounds to be encountered during this remediation are elevated petroleum fuel hydrocarbons, found typically in oil field operations.

ASSOCIATED HAZARD:

Gasoline, Diesel, Oil and Grease:	Dermal: can defat and irritate skin Inhalation: TLV's typically 300-600 ppm Acute effects = irritant to skin, eyes, nose, mouth
BTEX:	Dermal: can defat and irritate skin Inhalation: TLV for benzene = 1 ppm Acute effect = irritant Chronic effect: benzene is a human carcinogen.
MTBE:	Dermal: can defat and irritate skin Inhalation: TLV for MTBE = 25 ppm Acute effect = irritant Chronic effects: MTBE is a human carcinogen.

EXPOSURE PROBABILITY AND LIKELY CONSEQUENCE:

A low hazard level exists where there is no contact with the chemicals, when low concentrations are encountered, or when proper protection is worn.

COUNTERMEASURES:

- When OVM reading is less than 50 ppm above background level wear Level D protection;
- When OVM reading is above 100 ppm for greater that 15 minutes wear Level C protection;
- When OVM reading is above 1000 ppm cease work operations until level decreases.

Fire and Explosion

POTENTIAL FOR FIRE OR EXPLOSION:

Workers may encounter fire or explosion hazards on this project. Fire or explosion could occur by rupturing an underground gas line or if digging through soil that contains high concentrations of fuel hydrocarbons.

EXPOSURE PROBABILITY AND LIKELY CONSEQUENCE:

Low probability with moderate consequence.

COUNTERMEASURES:

Seek information about possible underground obstructions from knowledgeable individuals before excavating. Note if Dig Alert has marked the site for underground lines (see Section 3.11).

Oxygen Deficiency

On-site workers are not likely to encounter an oxygen deficiency. Workers will not enter confined spaces on this project.

Ionizing Radiation

On-site workers are not likely to encounter radioisotopes or other hazardous ionizing radiation on this site.

Biologic Hazards

On-site workers are not likely to encounter biologic hazards on this site.

Safety Hazards

On-site workers may encounter physical safety hazards on this site. Work operations include:

- working near moving, powered machinery;
- slips, strains, trips, and falls;
- moving and lifting of heavy objects;
- use of hand tools, and
- use of motor vehicles.

COUNTERMEASURES:

Use experienced on-site persons. Wear hard-toed shoes and approved hard hats. Heighten worker awareness with a tailgate safety session for all on-site workers at the start of work each day. Maintain all equipment (including safety devices) in proper operation condition. Never leave an open excavation unattended.

Electrical

On-site workers could encounter electrical hazards on this site if the front loader contacts overhead power lines, if subsurface work encounters buried live electrical lines, if poor weather conditions exist, or equipment is not properly grounded.

COUNTERMEASURE:

Be sure not to raise the front loader in proximity to overhead power lines. Work shall cease if bad weather conditions exist. Equipment shall be grounded. Seek information about possible underground lines from knowledgeable individuals before excavating. Note if Dig Alert has marked the site for underground lines (see Section 3.11).

Heat Stress

There will be a low likelihood that on-site workers may encounter heat stress on this project. Workers will be wearing Tyvek suits and ambient temperature will likely be in the low-to mid-eighties.

COUNTERMEASURES:

Heighten worker awareness about heat stress at daily tailgate safety session. Monitor heart rate at break time. If heart rate exceeds 110 beats per minute, cut work period by one-third. Provide and encourage drinking of water and juices at the job site.

Cold Exposure

On-site workers are not likely to encounter cold exposure on this project.

Noise

On-site workers will likely encounter excessive noise levels from operation of the heavy equipment.

COUNTERMEASURE:

Workers will wear hearing protection around the backhoe and whenever they have trouble conversing in normal tones at a distance of about five feet.

Underground Lines

Every effort will be made to determine if underground lines exist beneath the site. Dig Alert will be contacted at least two working days prior to the commencement of work.

SITE CONTROL

For control purposes, the work area consists of a 160-foot area around the backhoe. It is open and workers will enter and leave the site with care. Smoking, eating, and drinking are prohibited in the immediate work area. The PSSO will exclude casual observers from the work area and will be on-site during work operations.

EMERGENCY RESPONSE PLAN

Following are emergency names, phone numbers, and contacts:

Police	911
Fire Department	911
Ambulance	911
Emergency Hospital Alta Bates Summit Medical Center 350 Hawthorne Avenue Oakland, California	(510) 655-4000
The Reynolds Group 520 West First Street Tustin, CA 92780	(714) 730-5397
Closest Phone for Emergencies:	Cellular Phones

Medical Emergencies:

For emergencies requiring ambulance service, call 911 for transportation of injured to hospital. Life-flight is available and can be obtained when calling 911.

Nearest Facility:

Alta Bates Summit Medical Center is nearest the Site. The most direct route is shown on the attached map.

Emergency Decontamination:

In a medical emergency, personnel decontamination is of lesser importance than medical attention. Alert paramedics or emergency room attendants about the potential for contamination.

The undersigned have read and will comply with the Health and Safety Plan for the 1400 Park Avenue, Emeryville Groundwater Well Development and Monitoring project.

REPRESENTING	NAME	SIGNATURE	DATE

THE REYNOLDS GROUP
A California Corporation by:

F. Edward Reynolds, Jr., P.E.

Yahoo! My Yahoo! Mail Make Y! your home page Search:

YAHOO! LOCAL Maps Sign In New User? Sign Up Maps Home - Broadband Map (New) - Help

Yahoo! Driving Directions

Maps | **Driving Directions** MY YAHOO!

Starting from: A 1400 Park Ave, Emeryville, CA 94608-3520 Save Address

Arriving at: B 350 Hawthorne Ave, Oakland, CA 94609-3108 Save Address

Distance: 1.7 miles **Approximate Travel Time:** 6 mins Get Reverse Directions

New Send to Phone | Text Only | Printable Version | Email Directions

Your Full Route

Zoom In - 1st.3city567state910- Zoom Out



Your Destination

View Larger Map



Traffic



SmartView [tm]

See locations on this

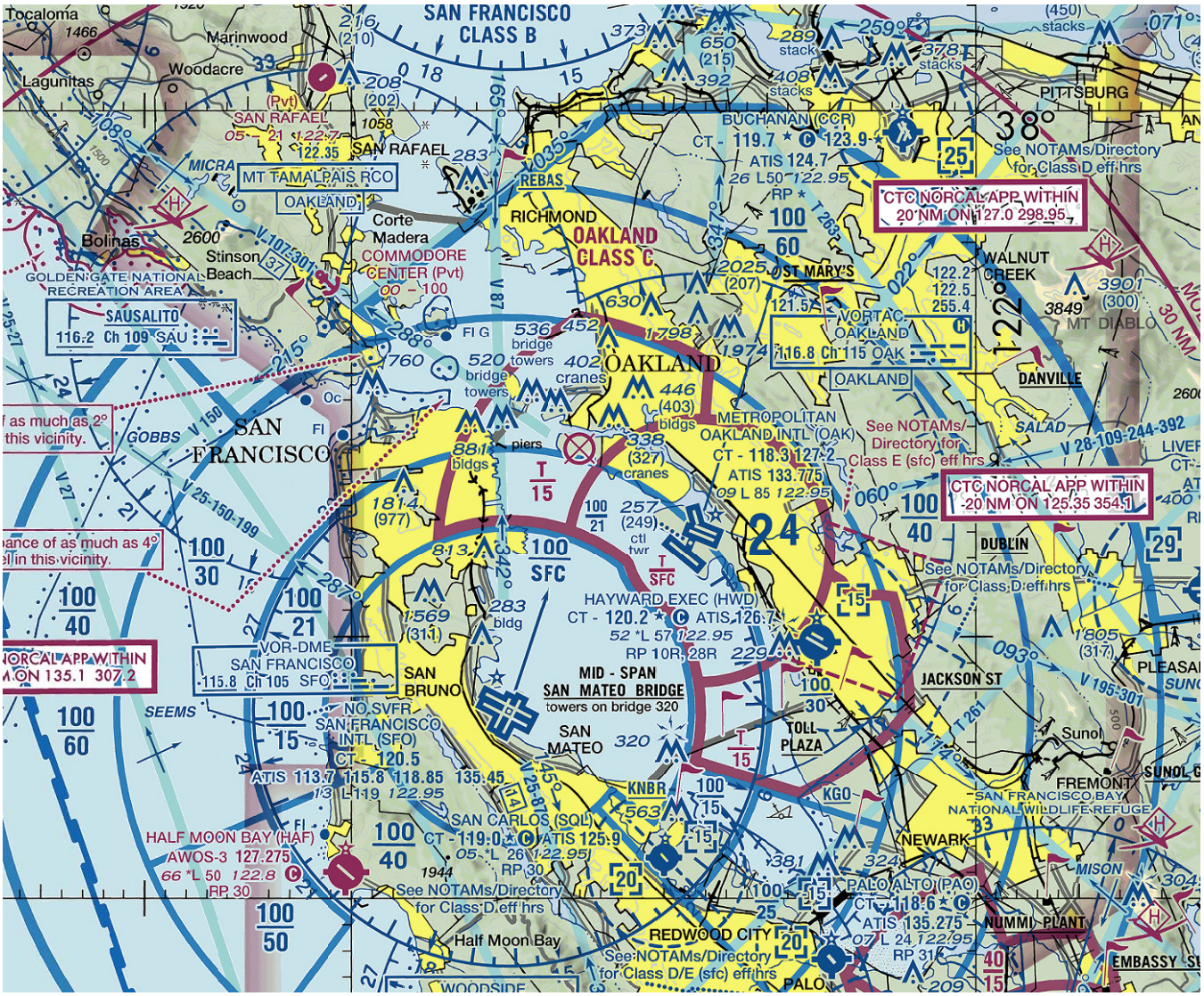
- Restaurants
- Hotels
- ATMs
- Gas Stations
- More

◉ Zoom in & Re-Center ○ Re-Center only

What's this?

Directions Show Turn by Turn Maps

1.	Start at **1400 PARK AVE, EMERYVILLE** going toward **HOLDEN ST** - go **0.1** mi
2.	Turn R on **HOLLIS ST** - go **0.4** mi
3.	Turn L on **34TH ST** - go **1.1** mi



˘ Olmnj
˘ O'|dqr
˘ 26:°7:þ<7*ŽZ 455°48þ<7*
˘ 54=65=5:ƒ

Go Jn
IdmjksƒSo'm

URS

Date: May 30, 2013

To: Ms. Juanita Bacey, Department of Toxic Substances Control

From: Des Garner, Erik Skov, Peter Healy

Subject: **Technical Memorandum**
Technichem Site Investigation, January and March 2013

1.0 INTRODUCTION

The California Environmental Protection Agency (Cal-EPA) Department of Toxic Substances Control (DTSC) has retained URS Corporation (URS) to conduct a site investigation for the remediation of groundwater at the Technichem, Incorporated Site (the Site), located at 4245 Halleck Street, Emeryville, California (Figure 1).

URS conducted indoor air and ground water monitoring to evaluate the extent of the chlorinated Volatile Organic Compounds (VOCs) plume in groundwater, primarily tetrachloroethene (PCE) and trichloroethene (TCE).

The Groundwater and Indoor Air Monitoring Workplan (Workplan) was submitted to DTSC in December, 2012 (URS, 2012). An addendum to the Workplan was submitted to DTSC in February 2013 (URS, 2013).

This Technical Memorandum summarizes the field activities and analytical results from the field work performed in January and March 2013.

The technical memorandum is organized as follows:

- Section 2: Site Background;
- Section 3: Summary of Field Activities;
- Section 4: Deviations from the Work Plan
- Section 5: Field Parameter and Analytical Results; and
- Section 6: Conclusions.

Supporting data are included in Figures 1 through 7, Tables 1 through 4, and Appendices A

URS Corporation
One Montgomery Street, Suite 900
San Francisco, CA 94104
Tel: 415.896.5858
Fax: 415.882.9261
www.urscorp.com

through D.

2.0 SITE BACKGROUND

The Technichem site is located at 4245 Halleck Street, in a mixed residential and commercial area of Emeryville in Alameda County, California. It is an approximately 0.35-acre parcel that supports a 1,600-square-foot concrete building, and is bordered to the north by a vacant industrial property (formerly a Sherwin William's paint manufacturing facility); to the east by Halleck Street; to the south by a commercial/industrial property; and to the west by a Union Pacific Railroad (UPRR) right-of-way. A multi-unit residential development is located across Halleck Street from the site.

The former Technichem facility consists of a one-story concrete tilt-up building with a brick façade. It is trapezoidal in shape, approximately 200 feet in length, and narrowing from 100 feet wide in the south to 60 wide in the north. It is divided into three separate areas. These areas were formerly used as follows: 1) the Technichem offices were located in the southern portion of the building; 2) Technichem processing and storage areas were in the central portion of the building; and 3) a northern area of the building was previously occupied by the San Francisco Newspaper Agency. The southern unit is currently occupied by an Asian imports company while the other two units are currently vacant. Technichem operated a PCE recycling facility, which received a DTSC Resource Recovery Facility Permit on January 22, 1987

In 2006 and 2007, PES Environmental, Inc. (PES) conducted two soil gas investigations at the site that yielded concentrations of VOCs that exceeded DTSC California Human Health Screening Levels (CHHSLs) (PES 2006, 2007). As a result, in 2008 the DTSC issued and Imminent and Substantial Endangerment Determination (ISED) regarding the site. The ISED required a response action to alleviate the hazard (DTSC, 2008).

In October 2010, Engineering/Remediation Resources Group (ERRG) conducted a removal action at the site. The work included removal of interior walls and equipment, removal of sections of concrete floor, excavation of contaminated soil, placement and compaction of backfill, and restoration of the site. The 2010 excavation was extended until contaminated soil was removed, and (1) DTSC-specified action levels (San Francisco Regional Water Quality Control Board (RWQCB) environmental screening levels for shallow soil) were met; (2) soil supporting loadbearing walls or other structures was encountered (within 2 feet from the perimeter walls or within 10 feet from the northern support columns); or (3) groundwater was encountered. Soil with concentrations exceeding the action level for PCE was left in place along the western wall, the northern excavation boundary, the eastern portion of the southern wall, and a small area at the base of the excavation in the center of the site due to engineering constraints. Based on the results of the previous removal action, ERRG recommended removing the remaining contaminated soil from the western wall, northern wall, and southern wall of the site. Excavation to address contamination at the

bottom of the excavation was not recommended because shallow groundwater was present in the excavations at a depth of 3 – 5 feet bgs (ERRG, 2012a).

In 2011 and 2012, ERRG conducted additional delineation sampling followed by an additional removal action at the site. The highest concentration of PCE detected in soil was 260,000 micrograms per kilogram (µg/kg) during delineation sampling. A Membrane Interface Probe (MIP) investigation was conducted at ten locations on and in the vicinity of the site to help delineate the extent of the VOCs in the subsurface. Six of the locations were selected for the installation of groundwater monitoring wells, and an additional six locations were selected for direct-push soil borings for collection of grab groundwater samples. ERRG installed three 1.5 inch pre-packed monitoring wells (GW-5, GW-6 and GW-8) to a total depth of 15 feet bgs, screened from 5 feet to 15 feet bgs to target the shallow water-bearing zone and three monitoring wells to a total depth of 25 feet bgs, and screened from 15 to 25 feet bgs to target the deeper water-bearing zones. The wells were subsequently developed using a surge block technique prior to sampling. PCE, TCE, cis-1,2-DCE, and vinyl chloride were detected in groundwater at concentrations exceeding the MCLs in 5 out of the 12 groundwater samples collected. Benzene was also detected in one groundwater sample at a concentration of 1.6 micrograms per liter (µg/L), above the MCL of 1 µg/L. Due to excessive draw-down in wells GW-4, GW-5, GW-6 and GW-12, field parameters did not fully stabilize during low-flow sampling (ERRG 2012b).

The removal action consisted of installation of shoring, structural engineering support of the building, concrete removal, excavation of soil exceeding the site action levels, and backfill and restoration. Soil was removed from three excavation areas within the building. Soil excavation areas were extended laterally in all directions until contaminated soil was removed, and DTSC-specified action levels were met, until the property boundary was encountered, or until groundwater was encountered. Soil was not excavated below groundwater. Soil with concentrations exceeding the action levels for PCE, trichloroethene (TCE), and cis-1,2-dichloroethene (cis-1,2-DCE) were left in place under the western wall at the western property boundary, because this area could not be excavated due to the limitations of the shoring design and proximity to the property line. The highest detected concentrations of PCE, TCE, and cis-1,2-DCE left in place were 12,000 µg/kg, 3,300 µg/kg, and 5,700 µg/kg, respectively. ERRG identified that vinyl chloride may have also been present in soil in this area, but was not detected above laboratory reporting limits, which were elevated due to high concentrations of the other analytes (ERRG, 2012).

3.0 SUMMARY OF MONITORING ACTIVITIES

3.1 Summary of Indoor Air Sampling

On January 3, 2013, prior to initiation of air sampling, URS evaluated all observed preferential vapor intrusion pathways with a photoionization detector (PID). Areas screened included plumbing penetrations in building bathrooms, existing groundwater

wells, floor drains, and foundation-wall joints. PID readings collected at the locations of observed preferential pathways are recorded on Figure 7. The PID screening yielded no detections in suspected preferential pathways. URS subsequently took PID readings from the head space of monitoring well GW-13 on May 2, after the well had been open to the atmosphere for 45 minutes, and recorded PID readings of up to 220 ppm of total VOCs.

URS also conducted an inventory of chemical products stored in the occupied part of the building (Area 1) and found: paint thinner, paint, insulating foam sealant, adhesive, "Goop-Off", Simple Green, dry wall primer/sealer and floor coating.

After screening preferential pathways, URS personnel collected indoor air samples from two locations in the building. Samples were collected over an 8-hour period in accordance with DTSC's October 2011 vapor intrusion guidance recommendations for non-residential structures. The samples were collected in 6-liter Summa canisters, and analyzed by Eurofins Airtoxics using U.S. EPA Method TO-15 Modified Low Level. This modified low-level TO-15 method ensured that the reporting limits were low enough to compare analytical data to the Cal-EPA CHHSLs for indoor air. Analytical results were validated by a URS senior chemist.

The two indoor samples were collected from the center of each of the two rooms being sampled. The ambient air sample was collected in a secure location on the Sherwin Williams property, immediately adjacent to the northern boundary of the site. All three samplers were elevated approximately 3 feet above ground level. The locations of the samples and analytical results are shown on Figure 6. Table 4 summarizes the analytical results from the January 2013 indoor air monitoring event.

3.2 Summary of Groundwater Monitoring

On January 4th, existing groundwater monitoring wells GW-4, GW-5, GW-6, GW-7, GW-8, and GW-12 were sampled and analyzed for VOCs by US EPA Method 8260B.

Monitoring wells were sampled using low-flow sampling techniques, utilizing a peristaltic pump, dedicated polyethylene tubing, and a multi-parameter flow-through cell. All groundwater sampling was conducted in accordance with the U.S. EPA guidance for low-flow sampling (U.S. EPA, 1996) and the DTSC Representative Sampling of Groundwater for Hazardous Substances, Guidance Manual for Groundwater Investigations (DTSC, 2008).

Groundwater samples were analyzed by Moore Twining Associates, a California Department of Public Health Services-certified laboratory. Analytical results were validated by a URS senior chemist.

Table 3 shows the field parameters from the January and March 2013 groundwater monitoring event. The field parameters and results are discussed in Section 6.0. The groundwater sampling logs are included in Appendix A. The laboratory analytical and data validation reports are provided in Appendix C.

4.0 WORK PLAN ADDENDUM ACTIVITIES

Following the evaluation of the groundwater results from the existing monitoring wells, DTSC determined that an additional monitoring well (GW-13) needed to be installed in the area of the site where the highest ERRG grab groundwater result was found (1,200 µg/L at location GW-2). Consequently, a work plan addendum was prepared for the installation, development and sampling of the new well.

Prior to commencing field activities, URS obtained a Water Resources Well Permit, from the Alameda County Public Works Agency. A copy of this permit is included in Appendix D.

URS obtained utility clearance by notifying Underground Services Alert (USA), and by hiring a specialized subcontractor, Sierra Nevada GSI, to verify the absence of utilities at the proposed monitoring well location. On March 8th, 2013, Penecore Drilling, under the supervision of URS field personnel, installed GW-13 (Figure 2). All drilling activities were performed under the supervision of a California Registered Geologist. A URS geologist continuously logged the boring. The soils were classified according to the Unified Soil Classification System. The boring log and well construction details for monitoring well GW-13 can be found in Appendix B. Well construction followed specifications consistent with DTSC's Monitoring Well Design and Construction for Hydrogeologic Characterization Guidance Manual (July, 1995).

In accordance with the DTSC's guidance manual, the well was developed by Penecore on March 15th, more than 72 hours after completion of the installation. Under URS oversight, Penecore purged and bailed the well until it produced clean, relatively sediment-free water.

On March 18th, URS personnel returned to the site and sampled GW-13 using the low-flow sampling technique, a bladder pump, dedicated polyethylene tubing, and a multi-parameter flow-through cell. Groundwater samples were analyzed for VOCs (U.S. EPA Method 8260B) by Moore Twining Associates. Samples were also analyzed by CENSUS quantitative Polymerase Chain Reaction for quantification of Dehalococcoides by Microbial Insights, Incorporated.

Table 2 includes the field parameters and groundwater elevations from the January 2013 groundwater monitoring event. The field parameters and results are discussed in Section 6.0. The groundwater sampling logs are included in Appendix A. The laboratory analytical and data validation reports are provided in Appendix C.

5.0 DEVIATIONS FROM THE WORK PLAN

The fieldwork was implemented following URS' Groundwater and Indoor Air Monitoring Workplan and its subsequent addendum. One deviation from the proposed procedures in the above documents occurred: due to the small diameter (1.5") of existing wells GW-4, GW-5, GW-6, GW-7, GW-8, and GW-12, URS was unable to use a bladder pump to sample the wells during the January 2013 event. Consequently, these wells were sampled using a peristaltic pump.

6.0 FIELD PARAMETERS AND ANALYTICAL RESULTS

6.1 Groundwater Elevations

Groundwater depths were measured to the nearest 0.01 foot during the groundwater monitoring events. Groundwater elevation measurements collected from six groundwater monitoring wells at the site in March 2013 were used to assess the groundwater flow direction within the uppermost water-bearing zone. The existing wells were screened at two different depth intervals from 5 – 15 feet bgs (GW-4, GW-6 and GW-8) and from 15 – 25 feet bgs (GW-4, GW-7, GW-12). The well installed by URS was screened from 15 – 25 feet bgs. Consequently, there are 4 elevation contour points for the deeper interval and three for the shallow interval. Due to uncertainty in the groundwater flow direction and anomalous water level readings, a second set of groundwater level data was collected on May 2. This data is presented in Table 1, and is the data set used for generating groundwater elevation contour maps.

For the shallow wells, groundwater elevation varied from 7.25 feet to 8.64 feet above mean sea level (msl). For the wells screened at the deeper interval, the groundwater elevations varied from 7.16 feet to 8.52 above msl. Although the elevations for both water-bearing zones are similar, the elevations cannot be contoured unless they are taken as two discrete data sets, thus supporting ERRG's selection of the two screened intervals for monitoring well installation.

The interpreted groundwater flow direction for both shallow and deep groundwater is to the southeast. In both cases the groundwater gradient is 0.008. Figures 2 and 3 show the interpreted groundwater flow directions for the two sets of wells.

6.2 Groundwater Physical Parameters

Groundwater physical parameters including temperature, pH, conductivity, Dissolved Oxygen (DO), and Oxidation Reduction Potential (ORP) were monitored in the field during groundwater collection. DO and ORP provide information on the suitability of groundwater for natural attenuation processes, as well as on any changes in groundwater chemistry during the pilot test. Physical parameters for GW-13 were collected in March 2013, after the newly installed well was developed. Parameters for the other wells were

recorded in January, 2013, during the initial groundwater sampling event. The data is presented in Table 2.

Dissolved Oxygen

DO in groundwater was measured in the field from each of the existing wells during the January sampling event.

Shallow Wells: GW-5, GW-6 and GW-8 [Screened 5 – 15 feet bgs]

Dissolved oxygen (DO) measurements were very consistent between the 3 shallow wells at 0.25 mg/L (GW-8), 0.38 mg/L (GW-6) and 0.45 mg/L (GW-5).

Deep Wells: GW-4, GW-7, GW-12 and GW-13 [Screened 15 – 25 feet bgs]

DO measurements for the deeper water-bearing zone were higher than for the shallow zone. DO ranged from 1.92 mg/L to 4.11 mg/L.

Oxidation-Reduction Potential

ORP was measured as a field parameter since the ORP of a groundwater system depends on and influences rates of degradation. Lower (negative) ORP values indicate more reducing conditions.

Shallow Wells: GW-5, GW-6 and GW-8 [Screened 5 – 15 feet bgs]

Shallow groundwater ORP measurements varied from -22 mV to -56.3 mV, indicating reducing conditions.

Deep Wells: GW-4, GW-7, GW-12 and GW-13 [Screened 15 – 25 feet bgs]

For the deeper wells, with the exception of GW-4, ORP measurements indicated oxidizing conditions, with positive ORP values from 47.4 mV to 157.6 mV. The GW-4 result was anomalous at -1.3 mV.

pH

The pH of groundwater has an effect on the presence and activity of microbial populations, because microbes generally thrive at pH values between 6 and 8.

Shallow Wells: GW-5, GW-6 and GW-8 [Screened 5 – 15 feet bgs]

The pH measured in the 3 shallow wells varied from 7.40 to 7.83.

Deep Wells: GW-4, GW-7, GW-12 and GW-13 [Screened 15 – 25 feet bgs]

For the deeper wells the pH varied from 6.55 to 7.62. The newly installed well, GW-13 had the lowest (most acidic) pH observed in groundwater at the site.

6.3 Groundwater Laboratory Results

During the January 2013 groundwater monitoring event groundwater was collected and analyzed for VOCs. Results from one additional sample collected at GW-13 in March 2013 are discussed together with the January 2013 groundwater monitoring results. The VOC results are summarized in Table 3.

VOCs

PCE concentrations ranged from not detected above the 0.12 µg/L reporting limit in GW-4 through GW-8 to 14 µg/L in GW-12 and 12,000 µg/L in the duplicate sample at monitoring well GW-13. With the exception of the low level (0.98 µg/L) detection of cis-1,2-DCE in GW-8, no VOCs were detected in the shallow groundwater.

The PCE detections in GW-12 and GW-13 exceed the State of California established MCL. The concentration of PCE in MW-12 and MW-13 was 14 µg/L and 12,000 µg/L, respectively.

TCE concentrations ranged from less than the 0.17 µg/L reporting limit in GW-4 through GW-8 to 16 µg/L in GW-12 and 42 µg/L in GW-13. The TCE detections in GW-12 and GW-13 exceed the MCL. The concentration of TCE in MW-12 and MW-13 was 16 µg/L and 42 µg/L, respectively.

The daughter product cis-1,2-DCE ranged from less than the 0.15 µg/L reporting limit in GW-4 through GW-7 to 14 µg/L in GW-12 and 21 µg/L in GW-13. The cis-1,2-DCE detections in GW-12 and GW-13 exceed the MCL.

The daughter product, trans-1,2-DCE, was not detected in most groundwater samples. At GW-13, trans-1,2-DCE was detected at a concentration slightly higher than the reporting limit, 0.17 µg/L. This value is below the MCL.

The daughter product vinyl chloride was not detected in any of the historical wells at the site. However, at GW-13 vinyl chloride was detected at a concentration of 7.2 µg/L, exceeding the MCL. Additionally, vinyl chloride was not detected in GW-12 in January 2013.

Bacteria

The biodegradation of PCE to vinyl chloride is carried out by a variety of bacteria including *dehelococcoides ethanogenes* (DHC) in the presence of appropriate conditions and electron donors. The only known species that can complete the degradation of vinyl chloride to

ethene is DHC. In accordance with the 2013 URS work plan addendum, the sample collected from GW-13 was analyzed for DHC. The results showed a concentration of less than the reporting limit of 2.8 cells/milliliter, indicating that reductive dehalogenation via microbial action does not appear to be actively occurring in this area of the site.

6.4 VOCs in Indoor Air

Indoor air samples were collected from two locations within the site building in addition to one ambient sample collected in a secure location on the property immediately north of the site to provide an indication of vapor intrusion into the site building.

PCE was detected in both sample locations at levels exceeding the CHHSL for indoor air at commercial/industrial properties of 0.693 µg/m^3. Sample A-1, collected in the currently unoccupied portion of the building where the removal action took place in 2012, yielded a result of 3.1 µg/m^3. The duplicate collected at this location had a PCE concentration of 3.2 µg/m^3. Sample A-2, collected in the building currently occupied by an Asian imports company, yielded a result of 1.7 µg/m^3. While TCE was detected in both sampling locations, concentrations were almost a full order of magnitude less than the CHHSL of 2.04 µg/m^3. The ambient air sample, A-3, yielded no detections of the chemicals of concern.

7.0 CONCLUSIONS

- Based on the results of the indoor air sampling, vapor intrusion into the building is occurring. Intrusion is likely taking place through preferential pathways such as plumbing penetrations, floor drains or cracks through the floor slab. The highest indoor air results were in Area 2, the unoccupied part of the building, where the highest PCE groundwater results (12,000 µg/L) were found. The indoor air result for Area 1 is lower than that of Area 2 (1.7 µg/m3 versus 3.2 µg/m^3) but both results exceed the CHHSL for indoor air at commercial/industrial properties. Chemicals, adhesives and paints stored in Area 1 (the occupied part of the building) do not appear to be contributing to the indoor concentrations of PCE.

- The PCE concentration of 12,000 µg/L detected in the new well, screened from 15 – 25 feet bgs is significantly higher (by a factor of 10) than the ERRG grab groundwater result from the same area (groundwater grab location GW-2: Figure 3). This grab groundwater sample was collected at a depth of 20 – 25 feet bgs (ERRG, 2012b).

- Based on groundwater elevation data, there is no downgradient monitoring point for the deeper groundwater-bearing zone (15 – 25 feet bgs). GW-8, although down and cross-gradient from GW-13 is screened in the shallower groundwater-bearing zone (5-15 ft bgs).

8.0 RECOMMENDATIONS

1. Vapor intrusion has resulted in concentrations of PCE in air in the two areas of the building sampled exceeding the PCE CHHSL for indoor air at commercial/industrial properties of 0.693 µg/m^3. The CHHSL corresponds to a lifetime excess cancer risk of 1 in 1,000,000. Although exceeding the CHHSL, the lifetime excess cancer risks for these PCE samples are 4.6 and 2.45 in 1,000,000, respectively, under a commercial/industrial scenario. The values are in the low end of the range for risk management decisions and represent risk based on conservative, health-protective assumptions. However, the building owner may consider sealing floor slab penetrations with epoxy or an equivalent material, to remove these potential migration pathways.

2. Additional delineation in the area of GW-13 is recommended. Based on ERRG's MIP data, indicating the presence of a shallow zone of contamination (ECD detector) between 10 and 15 feet bgs, this interval should be targeted for additional delineation work.

3. Based on groundwater elevation data, there is no down gradient monitoring point for the deeper groundwater-bearing zone (15 – 25 feet bgs). GW-8, although down and cross-gradient from GW-13, is not screened at the same depth. Consequently, URS recommends installing at least one monitoring well screened from 15 – 25 feet bgs in the area of MW-13 to further delineate the deep groundwater.

4. In situ remediation of the groundwater contamination area at GW-13 may be an alternative, once the source is better defined. Any enhanced biodegradation would require bioaugmentation as no DHC were detected in MW-13 during the 2013 sampling.

Please contact the under-signed at 650.391.4046 if you have any questions regarding this Draft Technical Memorandum.

Sincerely,

Des Garner
Senior Environmental Chemist

Erik Skov, PG, CHG
Senior Project Geologist

REGISTERED GEOLOGIST
ERIK SKOV
No. 7470
Expires 10/31/14
STATE OF CALIFORNIA

Peter Healy
Environmental Scientist

9.0 References

Cal-EPA, DTSC, 2008. *Imminent and Substantial Endangerment Determination, Former Technichem, Inc. 4245 Halleck Street, Emeryville, California.*

Cal-EPA, DTSC, 2008. *Representative Sampling of Groundwater for Hazardous Substances, Guidance Manual for Groundwater Investigations July 2005 [Rev. 2008]*. July.

Cal-EPA, DTSC, 2011. Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). October.

Cal-EPA, DTSC, 1995. *Monitoring Well Design and Construction for Hydrogeologic Characterization Guidance Manual*. July, 1995.

Engineering/Remediation Resources Group, Inc. (ERRG), 2012. *Final Interim Measures Completion Report, Former Technichem Site, 4245 Halleck Street, Emeryville, California.* June.

Engineering/Remediation Resources Group, Inc. (ERRG), 2012a. *Final Summary of Site Investigation and Remedial Recommendations, Former Technichem Facility, 4245 Halleck Street, Emeryville, California.* February.

Engineering/Remediation Resources Group, Inc. (ERRG), 2012b. *Groundwater Investigation Technical Memorandum, Former Technichem Inc. Facility, 4245 Halleck Street, Emeryville, California.* June.

PES Environmental, Inc., 2006. *Facility Closure Passive Soil Gas Investigation Report, Technichem Incorporated, 4245 Halleck Street, Emeryville, California.* June.

PES Environmental, Inc., 2007. *Additional Characterization Reports, Former Technichem Incorporated, 4245 Halleck Street, Emeryville, California.*

URS Corporation (URS), 2012. *Groundwater and Indoor Air Monitoring Work Plan, Technichem Incorporated Site, 4245 Halleck Street, Emeryville Alameda County, California.* December 2012.

URS Corporation (URS), 2013. *Groundwater and Indoor Air Monitoring Work Plan Addendum, Technichem Incorporated Site, 4245 Halleck Street, Emeryville Alameda County, California.* February 2013.

U.S. EPA, 1996. *Low Stress (Low Flow) Purging and Sampling, Procedure for the Collection of Groundwater Samples from Monitoring Wells, Revision 2.* July 30.

10.0 ATTACHMENTS:

TABLES

Table 1	Groundwater Elevation
Table 2	Field Parameters Summary of Detected VOCs in Groundwater (mg/L)
Table 3	Summary of Detected VOCs in Groundwater (mg/L)
Table 4	Summary of Detected VOCs in Indoor Air (µg/m^3)

FIGURES

Figure 1	Site Location Map
Figure 2	Groundwater Elevation Contour Map – Shallow Monitoring Wells 2013
Figure 3	Groundwater Elevation Contour Map - Deep Monitoring Wells 2013
Figure 4	Groundwater Monitoring Results (µg/L) ERRG – May and June 2012
Figure 5	Groundwater Monitoring Results (µg/L) January & March 2013
Figure 6	Indoor Air Sample Results (µg/m3) - January 2013
Figure 7	Preferential Pathway Screening Results (ppm) - January 2013

APPENDICES

Appendix A	Groundwater Monitoring Field Forms
Appendix B	Boring Log and Well Construction Details: GW-13
Appendix C	Laboratory Analytical Results and URS Validation Reports
Appendix D	Alameda County Public Works – Well Installation Permit

TABLES

Table 1
Groundwater Elevation
Technichem Incorporated Site Investigation
May 2013

Well	Date	Well Screen (feet bgs)	Depth to Water (feet)	TOC Elevation (feet msl)	Groundwater Elevation (feet msl)
GW-4[2]	5/2/2013	15-25	3.68	11.34	7.66
GW-5 [1]	5/2/2013	5-15	2.69	10.87	8.18
GW-6 [1]	5/2/2013	5-15	3.59	12.23	8.64
GW-7 [1]	5/2/2013	15-25	3.42	11.94	8.52
GW-8[1]*	5/2/2013	8-18	7.46	14.71	7.25
GW-12 [1]	5/2/2013	15-25	3.78	10.94	7.16
GW-13[2]	5/2/2013	15-25	3.23	10.99	7.76

TOC = top of casing
Bgs = below ground surface
msl = mean sea level
* = GW-8 is located on a loading dock that is 3 feet above floor level.
Therefore the screened interval (relative to the building floor) is from 5 to 15' bgs
but 8 - 18' bgs relative to the loading dock surface.
1 = TOC elevation data from 2012 ERRG survey
2 = TOC elevation data from 2013 URS Survey

Table 2
Field Parameters
Technichem Incorporated Site Investigation
May 2013

Well	Date	Temperature (^{o}Celsius)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)
GW-4	1/4/2013	16.71	1.259	1.92	7.40	-1.3
GW-5	1/4/2013	17.31	1.708	0.45	7.55	-56.3
GW-6	1/4/2013	13.97	0.980	0.38	7.83	-26.1
GW-7	1/4/2013	14.11	0.913	4.11	7.62	157.6
GW-8	1/4/2013	18.20	0.971	0.25	7.40	-22.0
GW-12	1/4/2013	17.28	1.172	2.19	7.39	47.4
GW-13	3/18/2013	17.32	1.067	2.63	6.55	142.2

Shaded cells indicate wells screened in the shallow interval [5 - 15 feet bgs]

1 = depth to water measured from top of well casing

2 = Well elevation data from Groundwater Investigation Technical Memorandum Former Technichem, Inc. Facility (ERRG 2012)

TOC = top of casing

ft msl = feet above mean sea level

ORP = Oxidation-Reduction Potential

mS/cm = milliSiemens per centimeter

DO = Dissolved Oxygen

mg/L = milligrams per liter

mV = millivolt

Table 3
Summary of Detected VOCs in Groundwater (ug/L)
Technichem Incorporated Site Investigation
May 2013

Sample Name	Date	Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	Vinyl chloride	trans-1,2-Dichloroethene
MCL		5.0	5.0	6.0	0.50	100
GW-4	1/4/2013	<0.50	<0.50	<0.50	<0.50	<0.50
GW-5	1/4/2013	<0.50	<0.50	<0.50	<0.50	<0.50
GW-6	1/4/2013	<0.50	<0.50	<0.50	<0.50	<0.50
GW-7	1/4/2013	<0.50	<0.50	<0.50	<0.50	<0.50
GW-8	1/4/2013	<0.50	<0.50	0.98	<0.50	<0.50
GW-12	1/4/2013	**14**	**16**	**14**	<0.50	<0.50
GW-90[1]	1/4/2013	**14**	**15**	**13**	<0.50	<0.50
GW-13	3/18/2013	**9900**	**42**	**21**	**6.8**	0.17 J
GW-91[2]	3/18/2013	**12000**	**42**	**21**	**7.2**	<0.50

Notes

μγ/L = micrograms per liter

Shaded values are above their respective MCLs

MCL = State of California Established Maximum Contaminant Level

VOCs = Volatile Organic Compounds

< = not detected at concentrations greater than the reporting limit shown

[1] = GW-90 is field duplicate of GW-12

[2] = GW-91 is field duplicate of GW-13

J = Value is estimated

Table 4
Summary of Detected VOCs in Indoor Air
Technichem Incorporated Site Investigation
May 2013

Sample Number	Date	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl Chloride	cis-1,2-Dichloroethene
CHHSL		**0.693**	**2.04**	**0.052**	**51.10**
A-1	1/3/2013	**3.1**	0.22	<0.043	<0.13
A-10[1]	1/3/2013	**3.2**	0.22	<0.042	<0.13
A-2	1/3/2013	**1.7**	0.20	<0.046	<0.14
A-3[2]	1/3/2013	<0.23	<0.18	<0.043	<0.13

[1] : Duplicate sample of A-1

[2] : Background sample, collected in ambient conditions

CHHSL = California Human Health Screening Level for indoor air at commercial/industrial properties

Values reported in ug/m^3

Shaded values are above their respective CHHSLs

VOCs = Volatile Organic Compounds

FIGURES



U:\GIS\Technichem\Projects\Fig1_Site_Vicinity.mxd 5/1/2013 1:10:04 PM

0 500 1,000 FEET

SITE LOCATION MAP

May 2013
28068189

Technichem
Emeryville, California

URS

FIGURE 1



U:\GIS\Technichem\Projects\Fig2_GW_contours_shallow_wells.mxd 5/30/2013 1:52:24 PM

Shallow monitoring well screen 5-15 feet bgs

Deep monitoring well screen 15-25 feet bgs

Excavation area (EERG 2010 & 2012)

Building outline

(8.64) Groundwater elevation

Groundwater elevation contour

Interpreted groundwater flow direction

0 20 40 FEET

GROUNDWATER ELEVATION CONTOUR MAP SHALLOW MONITORING WELLS 2013

May 2013
28068189

Technichem
Emeryville, California

URS

FIGURE 2



U:\GIS\Technichem\Projects\Fig3_GW_contours_deep_wells.mxd 5/29/2013 10:50:20 AM

Shallow monitoring well screen 5-15 feet bgs

Deep monitoring well screen 15-25 feet bgs

Excavation area (EERG 2010 & 2012)

Building outline

(8.52) Groundwater elevation

Groundwater elevation contour (dashed where inferred)

Interpreted groundwater flow direction

0 20 40 FEET

GROUNDWATER ELEVATION CONTOUR MAP DEEP MONITORING WELLS 2013

May 2013
28068189

Technichem
Emeryville, California

URS

FIGURE 3



Shallow monitoring well screen 5-15 feet bgs

Deep monitoring well screen 15-25 feet bgs

ERRG grab groundwater sample location

Building outline

PCE = Tetrachloroethene
TCE = Trichloroethene
VC = Vinyl Chloride
cis-1,2-DCE = cis-1,2-Dichloroethene
Groundwater data shown in micrograms/Liter
RED values exceed MCL

0 20 40 FEET

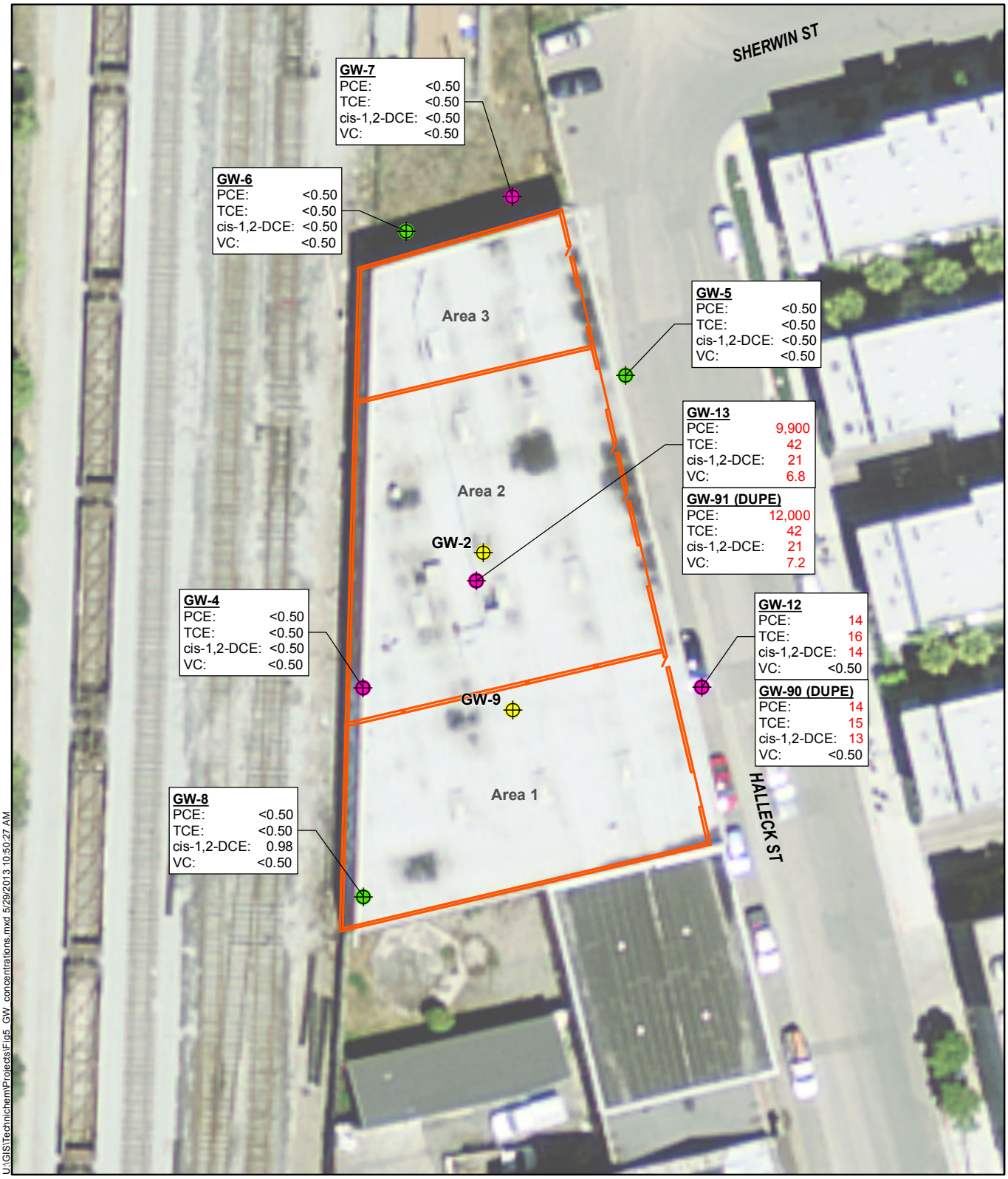
GROUNDWATER MONITORING RESULTS (µg/L) ERRG - MAY & JUNE, 2012

May 2013
28068189

Technichem
Emeryville, California

URS

FIGURE 4



U:\GIS\Technichem\Projects\Fig5_GW_concentrations.mxd 5/29/2013 10:50:27 AM

Shallow monitoring well screen 5-15 feet bgs

Deep monitoring well screen 15-25 feet bgs

ERRG grab groundwater sample location

Building outline

PCE = Tetrachloroethene
TCE = Trichloroethene
VC = Vinyl Chloride
cis-1,2-DCE = cis-1,2-Dichloroethene
Groundwater data shown in micrograms/Liter
RED values exceed MCL

0 20 40 FEET

GROUNDWATER MONITORING RESULTS (µg/L) JANUARY & MARCH, 2013

May 2013
28068189

Technichem
Emeryville, California

URS

FIGURE 5



U:\GIS\Technichem\Projects\Fig6_Air_sample_results.mxd 5/3/2013 11:47:01 AM

Air sample location

Building outline

PCE = Tetrachloroethene
TCE = Trichloroethene
VC = Vinyl Chloride
cis-1,2-DCE = cis-1,2-Dichloroethene
Indoor air data shown in micrograms/m^3
RED values exceed CHHSL

0 40 80 FEET

INDOOR AIR SAMPLE RESULTS (µg/m^3)
JANUARY 2013

May 2013
28068189

Technichem
Emeryville, California

URS

FIGURE 6



U:\GIS\Technichem\Projects\Fig7_Air_screening_results.mxd 5/3/2013 11:45:23 AM

Shallow monitoring well screen 5-15 feet bgs

Deep monitoring well screen 15-25 feet bgs

Building outline

ppm = parts per million
(MiniRae Photoionization Detector)

0 20 40 FEET

PREFERENTIAL PATHWAY SCREENING RESULTS JANUARY 2013

May 2013
28068189

Technichem
Emeryville, California

URS

FIGURE 7

APPENDIX A
GROUNDWATER MONITORING FIELD FORMS

URS 1 Montgomery Street, Suite 900
San Francisco, CA 94104
415.896.5858 Fax 415.882.9261

GROUNDWATER SAMPLING LOG

SITE NAME AND ADDRESS	JOB NUMBER	DATE	WELL #
Technicolor 4245 Hallelck St Emeryville		1/4/13	GW-4

PERSONNEL CONDUCTING SAMPLING w/ peri pump ICFB, PH

METER USED ☑ YSI6920 ☐ YSI3500 ☐ MP2 ☐ OTHER :

WELL / WATER STATUS

PID READING 0 ppm

DEPTH TO WATER (FROM TOP OF PVC) 2.49

WATER CONDITION (Color & Odor, Oil Sheen, Etc.)
No odor, clear, no sheen

REMARKS: (Weather/Area? Ground surface/Nearby activities/Etc.) Paved (concrete) Interior of vacant bldg

FIELD READINGS

METHOD: ☑ LOW FLOW ☐ PURGING

TOTAL PURGED ~~(GAL)~~ 5.4L

mS/cm

TOTAL PURGE TIME (MIN) 21

Start 1253

Flow Rate

TIME	WATER LEVEL	PURGE RATE	VOLUME PURGED	TEMP. (C)	pH	CONDUCT. ~~(25C)~~	TURBIDITY (NTU)	D.O. (mg/L)	REDOX POTENTIAL
1259	~~6.65~~	300 mL/min	~~0.9~~ L	16.44	7.52	1.262	3.4	2.15	-24.3
1302	6.79	300	2.7L	16.54	7.48	1.263	4.3	2.03	-19.2
1305	8.74	300	3.6L	16.71	7.45	1.263	3.8	1.96	-13.2
1308	9.89	200	4.2L	16.67	7.43	1.261	1.7	1.95	-9.5
1311	11.09	200	4.8L	16.69	7.42	1.260	1.8	1.96	-5.4
1314	12.29	200	5.4L	16.71	7.40	1.259	1.8	1.92	-1.3

SAMPLE

TIME SAMPLE TAKEN	ANALYSES REQUESTED
1315	VOCs
SAMPLE ID	
GW-4	

URS 1 Montgomery Street, Suite 900
San Francisco, CA 94104
415.896.5858 Fax 415.882.9261

GROUNDWATER SAMPLING LOG

SITE NAME AND ADDRESS	JOB NUMBER	DATE	WELL #
Technicolor 4245 Halleck St Emeryville		1/4/2013	GW-5

PERSONNEL CONDUCTING SAMPLING ICFB, PH

METER USED ☑ YSI6920 w/ peri pump ☐ YSI3500 ☐ MP2 ☐ OTHER :

WELL / WATER STATUS

PID READING 0 ppm

DEPTH TO WATER (FROM TOP OF PVC) one inch well 4.31

WATER CONDITION (Color & Odor, Oil Sheen, Etc.)
clear, slightly sulfuric, slightly sweet smell effervescent when put in VOA no sheen

REMARKS: (Weather/Area? Ground surface/Nearby activities/Etc.) Sunny @ 12:13 water was not pulling. stopped to add tubing. initial tubing was ~1 long ~3 ounces

FIELD READINGS

METHOD: ☑ LOW FLOW ☐ PURGING TOTAL PURGED (GAL) _____ TOTAL PURGE TIME (MIN) _____

Start time 11:55

TIME	WATER LEVEL	PURGE RATE	VOLUME PURGED	TEMP. (C)	pH	CONDUCT. (25C)	TURBIDITY (NTU)	D.O. (mg/L)	REDOX POTENTIAL
~~11:55~~									
11:58	6.00	~~400~~ ml/min	1.2 L	16.32	7.61	1,707	13.3	0.71	-13.4
12:01	7.21	300 ml/min	2.1 L	16.33	7.56	1,768	54.0	0.53	-26.4
12:04	7.77	200 ml/min	2.7 L	16.39	7.60	1,793	36.7	0.98	-42.2
12:08	8.45		3.3 L	16.71	7.59	1,769	29.4	0.70	-46.6
12:17	9.29		3.9 L	16.82	7.58	1,703	17.5	0.84	-53.2
12:20	10.00		4.2 L	17.01	7.58	1,705	16.3	0.72	-54.0
12:23	10.61		4.5 L	17.14	7.56	1,708	16.6	0.61	-54.4
12:26	11.16		5.1 L	17.21	7.60	1,708	14.5	0.52	-55.1
12:29	11.51	200 ml/min	5.7 L	17.31	7.55	1,708	12.8	0.45	-56.3

Slow rate

SAMPLE

TIME SAMPLE TAKEN	ANALYSES REQUESTED
12:35	VOCs
SAMPLE ID	
GW-5	

URS

1 Montgomery Street, Suite 900
San Francisco, CA 94104
415.896.5858 Fax 415.882.9261

GROUNDWATER SAMPLING LOG

SITE NAME AND ADDRESS	JOB NUMBER	DATE	WELL #
Technichem 4245 Halleck St. ~~Oak~~ Emeryville CA	28068189	1/4/2013	GW-6

PERSONNEL CONDUCTING SAMPLING

KFB & PH

METER USED ☑ YSI6920 ☐ YSI3500 ☐ MP2 ☐ OTHER: w/ peri pump

WELL / WATER STATUS

PID READING: 0 ppm

DEPTH TO WATER (FROM TOP OF PVC): 2.96

WATER CONDITION (Color & Odor, Oil Sheen, Etc.): Clear water, no odor, no sheen

REMARKS: (Weather/Area? Ground surface/Nearby activities/Etc.) Gravel & grass lot, N of building

FIELD READINGS

METHOD: ☑ LOW FLOW ☐ PURGING

TOTAL PURGED (GAL) _____ TOTAL PURGE TIME (MIN) _____

TIME	WATER LEVEL	PURGE RATE	VOLUME PURGED	TEMP. (C)	pH	CONDUCT. ~~(25C)~~ (mS/cm)	TURBIDITY (NTU)	D.O. (mg/L)	REDOX POTENTIAL
Start 1100									
1103	4.24	300 mL/min	0.9 L	13.96	7.36	1.000	7.9	1.44	99.7
1106	5.10	300	1.8 L	13.81	7.61	0.987	8.1	0.55	46.7
slow rate 1109	6.59	300	2.7 L	13.74	7.78	0.969	11.8	0.44	12.0
slow rate 1112	7.37	275	3.525 L	13.73	7.85	0.954	26.1	0.44	-2.3
1115	7.83	200	4.125	13.72	7.85	0.959	17.2	0.43	-10.4
1118	8.44	200	4.725	13.89	7.83	0.974	19.6	0.38	-19.0
1121	9.01	200	5.325	13.97	7.83	0.980	26.6	0.38	-26.1

SAMPLE

TIME SAMPLE TAKEN	ANALYSES REQUESTED
1124	VOCs
SAMPLE ID: GW-6	

URS
1 Montgomery Street, Suite 900
San Francisco, CA 94104
415.896.5858 Fax 415.882.9261

GROUNDWATER SAMPLING LOG

SITE NAME AND ADDRESS	JOB NUMBER	DATE	WELL #
Technicham 4245 Halleck St. Emeryville CA	28068189	1/4/2013	GW-7

PERSONNEL CONDUCTING SAMPLING KPB & PH

METER USED ☑ YSI6920 (02D0861A) w/ peri pump ☐ YSI3500 ☐ MP2 ☐ OTHER :

WELL / WATER STATUS

PID READING 0 ppm

DEPTH TO WATER (FROM TOP OF PVC) 2.66'

WATER CONDITION (Color & Odor, Oil Sheen, Etc.)
Clear water, no odor, no sheen

REMARKS: (Weather/Area? Ground surface/Nearby activities/Etc.)
Gravel & Grass lot, N of building ; Cool, Clear, ~60°

FIELD READINGS

METHOD: ☑ LOW FLOW ☐ PURGING

TOTAL PURGED (~~GAL~~) 10.35L

TOTAL PURGE TIME (MIN) 33

Start Purge 1004

TIME	WATER LEVEL	PURGE RATE	VOLUME PURGED	TEMP. (C)	pH	CONDUCT. (~~25C~~) mS/cm	TURBIDITY (NTU)	D.O. (mg/L)	REDOX POTENTIAL
1007	5.63	350 mL/min	1.05L	15.40	7.12	0.974	7.5	0.77	200.2
1010	6.93	350	2.10	15.11	7.39	0.955	9.5	0.74	173.6
1013	8.05	350	3.15	14.73	7.51	0.939	9.4	0.78	156.2
1016	8.57	300	4.05	14.53	7.57	0.929	9.8	1.13	145.7
1019	8.93	300	4.95	14.39	7.61	0.924	8.0	1.70	143.7
1022	9.25	300	5.85	14.31	7.63	0.919	7.2	2.16	146.1
1025	9.49	300	6.75	14.19	7.64	0.916	5.2	2.85	149.3
1028	9.74	300	7.65	14.23	7.64	0.915	6.1	3.47	152.7
1031	9.98	300	8.55	14.14	7.64	0.912	5.1	3.62	155.0
1034	10.14	300	9.45	14.15	7.63	0.913	4.1	3.95	156.6
1037	10.32	300	10.35	14.11	7.62	0.913	4.0	4.11	157.6

Slow Rate

SAMPLE

TIME SAMPLE TAKEN	ANALYSES REQUESTED
1040	VOCs
SAMPLE ID: GW-7	

URS
1 Montgomery Street, Suite 900
San Francisco, CA 94104
415.896.5858 Fax 415.882.9261

GROUNDWATER SAMPLING LOG

SITE NAME AND ADDRESS	JOB NUMBER	DATE	WELL #
Technicham 4245 Hollis St Emeryville	28068189	1/4/2013	GW-8

PERSONNEL CONDUCTING SAMPLING PH, KFB

METER USED ☑ YSI6920 ☐ YSI3500 ☐ MP2 ☐ OTHER :

WELL / WATER STATUS

PID READING: 0 ppm

DEPTH TO WATER (FROM TOP OF PVC): 1 inch pipe 6.39

WATER CONDITION (Color & Odor, Oil Sheen, Etc.): slightly sulphuric/sweet in smell, clear water, no sheen

REMARKS: (Weather/Area? Ground surface/Nearby activities/Etc.) interior construction work in the area surrounding the well (visible sawdust + plaster pwd)

interior of occupied building. well built at higher elevation than other wells on site ≈ 3 or 4 feet higher

FIELD READINGS

METHOD: ☑ LOW FLOW ☐ PURGING

TOTAL PURGED (~~GAL~~) L 6.2L

m>/cm TOTAL PURGE TIME (MIN)

start time ~~1:48~~ 1:43

TIME	WATER LEVEL	PURGE RATE	VOLUME PURGED	TEMP. (C)	pH	CONDUCT. (25C)	TURBIDITY (NTU)	D.O. (mg/L)	REDOX POTENTIAL
1:46	7.83	200ml/min	0.6L	17.63	7.30	1.011	8.8	0.47	45.6
1:49	8.14		1.2L	18.01	7.31	1.028	9.2	0.38	38.4
1:52	8.21		1.8L	18.03	7.31	1.024	11.4	0.35	32.6
1:55	8.24		2.4L	18.09	7.32	1.016	13.7	0.32	24.7
1:58	8.33		3L	18.11	7.33	1.010	14.6	0.31	17.7
2:01	8.34		3.6L	18.13	7.37	1.004	20.7	0.29	8.0
204	8.36		4.2L	18.15	7.40	0.995	21.0	0.28	-2.7
2:07	8.39	~	~~4~~ 5L	18.16	7.38	0.986	21.0	0.27	-9.5
2:10	8.42		5.6L	18.18	7.40	0.977	18.5	0.25	-18.0
2:13	8.45	200ml/min	6.2L	18.20	7.40	0.971	19.1	0.25	-22.0

SAMPLE

TIME SAMPLE TAKEN	ANALYSES REQUESTED
14:15	VOCs
SAMPLE ID: GW-8 ms/msD	

URS
1 Montgomery Street, Suite 900
San Francisco, CA 94104
415.896.5858 Fax 415.882.9261

GROUNDWATER SAMPLING LOG

SITE NAME AND ADDRESS	JOB NUMBER	DATE	WELL #
Technicolor 4245 Hollis St Emeryville	28068189	1/4/2013	GW-12

PERSONNEL CONDUCTING SAMPLING

w/ Peri Pump — PH, KFB

METER USED ☑ YSI6920 ☐ YSI3500 ☐ MP2 ☐ OTHER :

WELL / WATER STATUS

PID READING: 0 ppm

DEPTH TO WATER (FROM TOP OF PVC): 1 inch pipe 3.90

WATER CONDITION (Color & Odor, Oil Sheen, Etc.): Clear water, no odor, no sheen

REMARKS: (Weather/Area? Ground surface/Nearby activities/Etc.) sunny, slight wind

Outside occupied warehouse

FIELD READINGS

METHOD: ☑ LOW FLOW ☐ PURGING

TOTAL PURGED (GAL) _____ TOTAL PURGE TIME (MIN) _____

mS/cm

TIME	WATER LEVEL	PURGE RATE	VOLUME PURGED	TEMP. (C)	pH	CONDUCT. (25C)	TURBIDITY (NTU)	D.O. (mg/L)	REDOX POTENTIAL	
Start 1445										
~~1448~~	~~5.49~~	~~250 mL/min~~	~~0.75L~~	~~17.09~~	~~7.86~~	~~0.607~~	~~1.9~~	~~4.35~~	~~26.1~~	meter not full
1451	6.69	250 mL/min	1.5L	17.28	7.44	1.163	2.0	2.57	33.7	
1454	8.24	250	2.25L	17.26	7.39	1.169	1.4	2.36	37.0	
1457	9.29	250	3.0 L	17.29	7.39	1.171	1.7	2.31	39.3	
1500	10.55	250	3.75L	17.34	7.40	1.173	1.5	2.24	42.2	
1503	11.47	200	4.35L	17.34	7.36	1.173	1.0	2.19	44.7	Slow Rate
1506	12.39	200	4.95L	17.28	7.39	1.172	0.9	2.19	47.4	

SAMPLE

TIME SAMPLE TAKEN	ANALYSES REQUESTED
1510 (GW-12)	
SAMPLE ID: GW-12 | GW-90 (1520)	VOCs

URS
1 Montgomery Street, Suite 900
San Francisco, CA 94104
415.896.5858 Fax 415.882.9261

GROUNDWATER SAMPLING LOG

SITE NAME AND ADDRESS	JOB NUMBER	DATE	WELL #
Technichem		3/18/13 PM	MW-13

PERSONNEL CONDUCTING SAMPLING

METER USED ☑ YSI6920 ☐ YSI3500 ☐ MP2 ☐ OTHER :

6.69

WELL / WATER STATUS

PID READING: NA

DEPTH TO WATER (FROM TOP OF PVC):

WATER CONDITION (Color & Odor, Oil Sheen, Etc.): cloudy → turbidity is reading higher than expected

REMARKS: (Weather/Area? Ground surface/Nearby activities/Etc.): cloudy

3:39)

FIELD READINGS

METHOD: ☐ LOW FLOW ☐ PURGING

TOTAL PURGED (GAL):

TOTAL PURGE TIME (MIN):

TIME	WATER LEVEL (feet)	PURGE RATE (mL/min)	VOLUME PURGED (mL)	TEMP. (C)	pH	CONDUCTIVITY (~~uS~~ mS)	TURBIDITY (NTU)	D.O. (mg/L)	REDOX POTENTIAL ~~(mV)~~ ORP
3:42		600 ~~mL/min~~	~~13.3~~	17.36	6.53	1.014	175.8	3.34	147.6
345		300		17.35	6.56	1.024	229.6	3.58	146.9
348	7.51	↓		17.31	6.53	1.053	220.0	3.01	145.2
351	7.62	↓		17.31	6.53	1.062	196.0	2.70	144.7
354	7.77	↓		17.32	6.55	1.067	201.8	~~0.~~ 2.63	142.2

omitted

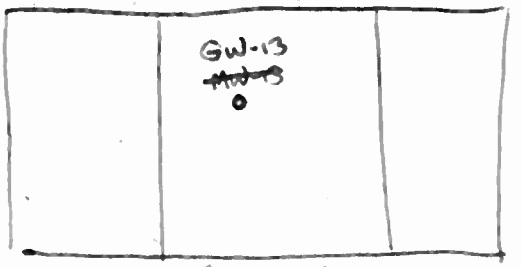
SAMPLE

TIME SAMPLE TAKEN	ANALYSES REQUESTED
11	VOCs
SAMPLE ID: MW-13	

APPENDIX B
BORING LOG AND WELL CONSTRUCTION DETAILS:

LOCATION OF BORING

N →



DATUM Halleck Street ELEVATION PPM

JOB NUMBER	CLIENT	LOCATION
28068189	DTSC	Emeryville Technology

DRILLING METHOD: HA / DPT / HSA

BORING NUMBER GW MW-13

SHEET 1 OF 2

SAMPLING METHOD: DPT (Macrocore)

DRILLING START TIME	DRILLING FINISH TIME
1015	1400

SURFACE CONDITIONS: Concrete 6 slab 18" A3 & cr concrete to sted base

DATE	DATE
3/8/13	3/8

DRILLING CONTRACTOR Penecore Martin

BY P. Healy DATE 3/8/13 CHECKED BY

BAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	TIME	SAMPLE NUMBER / SAMPLE DEPTH	BLOWS/FT. SAMPLER	OVA PID: AUGER	OVA PID: SAMPLE	OVA PID: CUTTINGS	DEPTH IN FEET	SOIL GRAPH
						0 ppm		0	
						0		1	
						0		2	GP
						0		3	
						0		4	
	60/55					0		5	CL
								6	
								7	
								8	
								9	
	60/60					0		10	
								11	
								12	
								13	
								14	
	60/60							15	
						0		16	
								17	SC
								18	
						0		19	
								20	CL
								21	ML

0-2' 10YR 4/1 Drk grnish grey. Grnish sandy gravel, sparse grained gravels, moist [E, 1]

Pulverized concrete/cement @ 3'

~4', wet ag base 3.5'-4' base is wet.

4.5' grades to constr. debris fill. brick fragments

4.75' N, 2.5/ black CL silty clay med dense, med stiff to stiff, low plasticity, moist [0, 0, 20, 80] slight org. odor

9' grades to soft, some gravels & sands N, 3/ V. Drk grey, sparse organics [5, 5, 20, 70] root bettles,

10' grades to gravel, med stiff to stiff 5G 4/1 drk grnish grey

11.5' grades w/ decreasing gravel

13' grades to 10YR 6/4

16' grades to sparse gravel & sands [10, 10, 15, 65]

17-18' 10YR 5/6 yellowish brn, ~~silty clay~~ clayey sand w/ sparse angular gravel, medium dense, moist [5, 10, 5, 20]

20-21' 10YR 5/6 yellowish brn, silty clay, clayey silt, med stiff, moist, low plast.

21' ML grades to silt w/ clay, med stiff, low plasticity

2.5Y 6/2 light brnish grey

URS

LOCATION OF BORING

JOB NUMBER	CLIENT	LOCATION
28068189	DTSC	Emeryville Technicher

DRILLING METHOD: HA / DPT / HSA

BORING NUMBER: GW-13

SHEET: 2 OF 2

SAMPLING METHOD: DPT (Macrocore)

DRILLING: START TIME 1015 / FINISH TIME 1400

SURFACE CONDITIONS: Concrete

DATE: 3/8/13 / DATE: 3/8/13

DRILLING CONTRACTOR Penelore

DATUM

ELEVATION

SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	TIME	SAMPLE NUMBER / SAMPLE DEPTH	BLOWS/FT. SAMPLER	OVA BD AUGER	OVA BD SAMPLE	OVA BD CUTTINGS	DEPTH IN FEET	SOIL GRAPH
								20	CL
								21	ML
								22	
						0		23	
								24	
								25	
								26	
								27	
								28	
								29	
								30	
								1	
								2	
								3	
								4	
								5	
								6	
								7	
								8	
								9	
								0	
								1	

23' Micro fractures noted, iron oxide build up in fractures

2.5Y 7/4, color grades to pale yellow

26.5 color grades to 2.5Y 7/4 pale yel

~~TD = 25' bgs~~

grades w/ trace gravel

grades very stiff

TD = 30' bgs

Interval from 25'-30' backfilled w/ bentonite chips

BY P. Healy DATE 3/8/13 CHECKED BY

URS

MONITORING WELL INSTALLATION RECORD

MONITORING WELL
MONITORING WELL NO.: GW-13
PROJECT: Trohnichem
SITE: 4245 Halleck St. Emeryville
BOREHOLE NO.:
WELL PERMIT NO.: W2013-0158
TOC TO BOTTOM OF WELL:

DRILLING INFORMATION
DRILLING BEGAN:
DATE: 3/8/13 TIME: 1015
WELL INSTALLATION BEGAN:
DATE: 3/8/13 TIME: 1410
WELL INSTALLATION FINISHED:
DATE: 3/8/13 TIME: 1630
DRILLING CO.: Penecore
DRILLER: Martin
LICENSE:
DRILL RIG: Geoprobe 7822 DT
DRILLING METHOD:
- ☑ HOLLOW STEM AUGER
- ☐ AIR ROTARY
- ☐ OTHER:

DIAMETER OF AUGERS:
ID: 6" OD: 8"

WELL CASING
- ☑ SCHEDULE 40 PVC
- ☐ OTHER:

PRODUCT:
MFG. BY:
CASING DIAMETER:
ID: 2" OD:
LENGTH OF CASING:

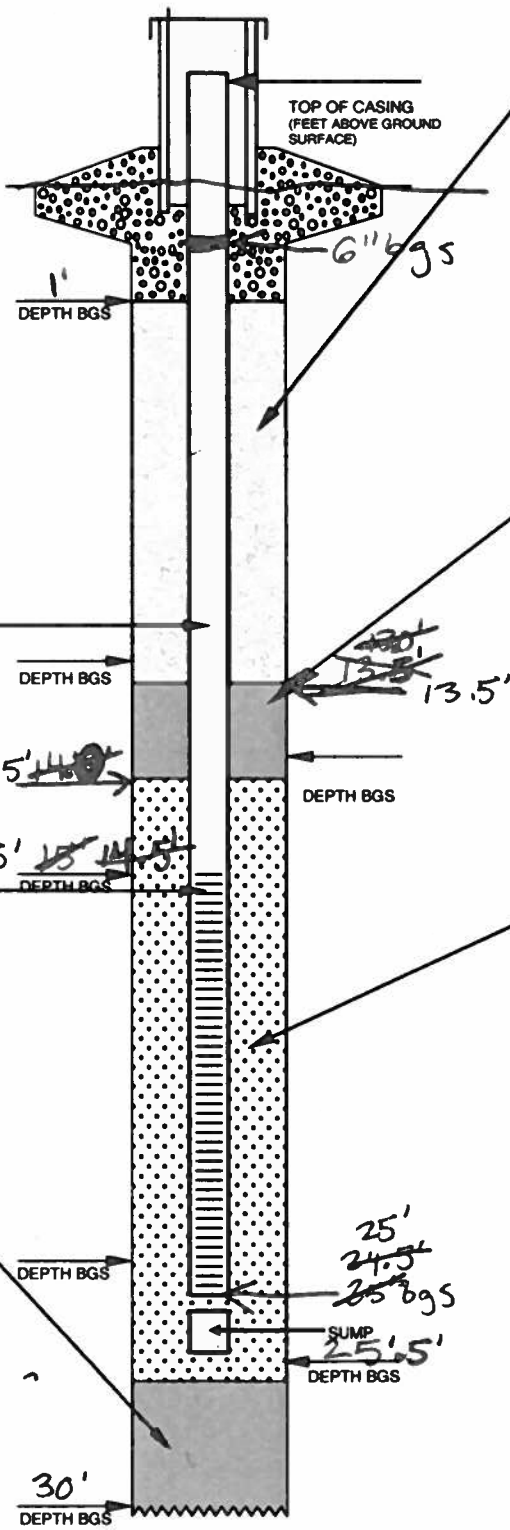
WELL SCREEN
- ☑ SCHEDULE 40 PVC
- ☐ OTHER:

PRODUCT:
MFG. BY:
CASING DIAMETER:
ID: 2" OD:
SLOT SIZE: 0.010"
LENGTH OF SCREEN: ~~10'~~ 9.5'

BOREHOLE BACKFILL
AMOUNT CALCULATED:
AMOUNT USED:
- ☑ BENTONITE CHIPS, SIZE: Medium
- ☐ BENTONITE PELLETS, SIZE:
- ☐ SLURRY:
- ☐ FORMATION COLLAPSE:
- ☐ OTHER:

PRODUCT: Pure Gold
MFG. BY: Cetco
METHOD INSTALLED:
- ☑ POURED ☐ TREMIE
- ☐ OTHER:

SURFACE COMPLETION
- ☑ FLUSH MOUNT
- ☐ ABOVE GROUND WITH BUMPER POST
- ☐ CONCRETE ☐ ASPHALT



SURVEY INFORMATION
TOC ELEVATION: 10.99 Ft. above MS
GROUND SURFACE ELEVATION: 11.61
NORTHING: 2130015.62
EASTING: 6044537.73
DATE SURVEYED: 4/26/13
SURVEY CO.: URS

ANNULAR SEAL
VOLUME CALCULATED:
AMOUNT USED: 5 3/4 x 50# bags
- ☐ GROUT FORMULA (PERCENTAGES)
  - PORTLAND CEMENT:
  - BENTONITE:
  - WATER:
- ☐ PREPARED MIX
  - PRODUCT: QuickRete No.
  - MFG. BY:

METHOD INSTALLED:
- ☑ POURED ☐ TREMIE
- ☐ OTHER:

BENTONITE SEAL
VOLUME CALCULATED:
AMOUNT USED: 90% of 50# bag
- ☐ PELLETS, SIZE:
- ☑ CHIPS, SIZE: Medium
- ☐ OTHER:

PRODUCT: Pure Gold
MFG. BY: CETCO
METHOD INSTALLED:
- ☑ POURED ☐ TREMIE
- ☐ OTHER:

AMOUNT OF WATER USED: 5 gal Tons

FILTER PACK
- ☐ PREPACKED FILTER

VOLUME CALCULATED:
AMOUNT USED: 1 x 50 lb. + 2 lbs.
- ☑ SAND, SIZE: #2/12

PRODUCT: Lapis Lustre
MFG. BY: CEMEX
METHOD INSTALLED:
- ☑ POURED ☐ TREMIE
- ☐ OTHER:

WATER LEVEL:
(BTOC AFTER WELL INSTALLATION)

CENTRALIZERS USED?
☐ YES ☑ NO;
CENTRALIZER DEPTHS:

LEGEND
BGS = BELOW GROUND SURFACE
BTOC = BELOW TOP OF CASING
N/A = NOT APPLICABLE
NR = NOT RECORDED
TOC = TOP OF CASING

GW- 13

DEPTH IN FEET	SAMPLES	INCHES DRIVEN / RECOVERED	PID READING (parts per million)	SYMBOL	DESCRIPTION
0		0			6" slab 18" aggregate base and/or concrete treated base
		0			
		0		GP	**SANDY GRAVEL**, dark greenish gray (10Y 4/1), moist, coarse grained gravels, [FILL] pulverized concrete/cement at 3' bgs.
		0			wet at aggregate base 3.5-4' bgs, base is wet
		0			grades to construction debris fill, brick fragments
5		0	60/55	CL	**SILTY CLAY**, black (N 2.5/), medium stiff to stiff, moist, low plasticity, slight organic odor [0, 0, 20, 80]
10		0	60/60		grades to soft, with gravels and sands, very dark gray (N 3/), sparse organics, rootlets [5, 5, 20, 70]
					grades to gravel, dark greenish gray (5G 4/1), medium stiff to stiff
					grades with decreasing gravel
					grades to (10YR 6/4)
15			60/60		grades with gravel and sands [10, 10, 15, 65]
				SC	**CLAYEY SAND**, yellowish brown (10YR 5/6), medium dense, moist, with trace angular gravel [5, 70, 5, 20]
20		0		CL ML	**SILTY CLAY/CLAYEY SILT**, yellowish brown (10YR 5/6), medium stiff, moist, low plasticity [0, 0, 50, 50]
				ML	**SILT WITH CLAY**, light brownish gray (2.5Y 6/2), medium stiff, low plasticity
25		0			micro fractures noted, ironoxide build up in fractures
					grades to pale yellow (2.5Y 7/4)
					grades with trace gravel
30					grades very stiff
35					

Note:
1. End of boring at 30 ft. bgs.
2. Interval from 24-30' bgs backfilled with bentonite chips.

Job No: 28068189 Pt. ID: DTSC_TECHNICHEM_MAR13.GPJ	URS	**Log of Boring**
Date Completed: 3/8/13 Boring Depth: 30 ft.	Driller: Penecore Drilling Method: Direct Push/Hollow Stem Auger	Location: Oakland, CA
Top of Casing Elev: 16.3 ft. Casing Depth: 30.0 ft.	Casing Type: PVC Casing Diam: 2.0 in. Screened Interval: 15-25 ft.	Slot Size: 0.010 in. Sand Pack: 2/12

5/2/13..hk T:\Gint Project\Projects\dtsc_technichem_mar13.gpj

APPENDIX C
LABORATORY ANALYTICAL RESULTS AND URS VALIDATION REPORTS

LEVEL III Data Validation Report

PROJECT: Technichem

LABORATORY: Eurofins Air Toxics, Folsom, CA

LAB NUMBER: 1301126R1

SAMPLES: A-1, A-2, A-10, A-3

MATRIX: Indoor Air

Analysis	Volatile Organic Compounds* TO-15 SIM
Holding Time	✓
Surrogate Recovery	✓
MS/MSD	NA
LCS (Blank Spike)	✓
Method Blanks	✓
Field Duplicates (A-1 and A-10)	✓
Trip Blanks	NA
Reporting Limits	✓
Continuing Calibration Verification (CCV)	✓

* Vinyl Chloride, cis-1,2-dichloroethene; trichloroethene, tetrachloroethene

✓ – QC criteria were met.

Note: None.

Summary:

Based on this Level III validation, these data are usable for their intended purpose. None of these data were qualified or rejected.

eurofins | Air Toxics

1/30/2013
Ms. Kali Futnani
URS Corporation
One Montgomery St.
Suite 900
San Francisco CA 94104

Project Name: Technichem
Project #: 28068189
Workorder #: 1301126R1

Dear Ms. Kali Futnani

The following report includes the data for the above referenced project for sample(s) received on 1/9/2013 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 SIM are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kyle Vagadori

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1301126R1

Work Order Summary

CLIENT:	Ms. Kali Futnani URS Corporation One Montgomery St. Suite 900 San Francisco, CA 94104	**BILL TO:**	Accounts Payable Austin URS Corporation P.O. BOX 203970 Austin, TX 78720-1088
PHONE:	415-896-5858	**P.O. #**	
FAX:	415-882-9261	**PROJECT #**	28068189 Technichem
DATE RECEIVED:	01/09/2013	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	01/22/2013		
DATE REISSUED:	01/23/2013		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	A-2	Modified TO-15 SIM	7.5 "Hg	5 psi
02A	A-1	Modified TO-15 SIM	6.0 "Hg	5 psi
03A	A-10	Modified TO-15 SIM	5.5 "Hg	5 psi
04A	A-3	Modified TO-15 SIM	6.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15 SIM	NA	NA
06A	CCV	Modified TO-15 SIM	NA	NA
07A	LCS	Modified TO-15 SIM	NA	NA
07AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 01/30/13

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NY NELAP - 11291,
TX NELAP - T104704434-12-4, UT NELAP CA009332012-3, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2012, Expiration date: 10/17/2013.
Eurofins Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15 Full Scan/SIM
URS Corporation
Workorder# 1301126R1

Four 6 Liter Summa Canister (SIM Certified) samples were received on January 09, 2013. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the Full Scan and SIM acquisition modes. The method involves concentrating up to 1.0 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
ICAL %RSD acceptance criteria	</=30% RSD with 2 compounds allowed out to < 40% RSD	For Full Scan: 30% RSD with 4 compounds allowed out to < 40% RSD For SIM: Project specific; default criteria is </=30% RSD with 10% of compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	For Full Scan: </= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers For SIM: Project specific; default criteria is </= 30% Difference with 10% of compounds allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The results for each sample in this report were acquired from two separate data files originating from the same analytical run. The two data files have the same base file name and are differentiated with a "sim" extension on the SIM data file.

Due to the linear calibration range of the instrument, the reporting limit for Heptane was raised from

0.10 ppbv to 0.50 ppbv.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

PER CLIENT REQUEST, THE WORK ORDER WAS RE-ISSUED ON JANUARY 23, 2013 TO CORRECT THE TARGET COMPOUND LIST TO REPORT ONLY SIM COMPOUNDS VINYL CHLORIDE, CIS-1,2-DICHLOROETHENE, TRICHLOROETHENE, AND TETRACHLOROETHENE. CHANGING THE COMPOUND LIST CAUSED SOME PREVIOUSLY REPORTED COMPOUNDS TO BECOME NOT REPORTED.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

eurofins | Air Toxics

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM

Client Sample ID: A-2

Lab ID#: 1301126R1-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.036	0.038	0.19	0.20
Tetrachloroethene	0.036	0.25	0.24	1.7

Client Sample ID: A-1

Lab ID#: 1301126R1-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.034	0.041	0.18	0.22
Tetrachloroethene	0.034	0.46	0.23	3.1

Client Sample ID: A-10

Lab ID#: 1301126R1-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.033	0.040	0.18	0.22
Tetrachloroethene	0.033	0.47	0.22	3.2

Client Sample ID: A-3

Lab ID#: 1301126R1-04A

No Detections Were Found.

eurofins | Air Toxics

Client Sample ID: A-2

Lab ID#: 1301126R1-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e011413simr1**	**Date of Collection: 1/3/13**	
Dil. Factor:	**1.79**	**Date of Analysis: 1/14/13 06:36 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected	0.046	Not Detected
cis-1,2-Dichloroethene	0.036	Not Detected	0.14	Not Detected
Trichloroethene	0.036	0.038	0.19	0.20
Tetrachloroethene	0.036	0.25	0.24	1.7

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	105	70-130

eurofins | Air Toxics

Client Sample ID: A-1

Lab ID#: 1301126R1-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e011414simr1**	**Date of Collection: 1/3/13**	
Dil. Factor:	**1.68**	**Date of Analysis: 1/14/13 07:47 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.017	Not Detected	0.043	Not Detected
cis-1,2-Dichloroethene	0.034	Not Detected	0.13	Not Detected
Trichloroethene	0.034	0.041	0.18	0.22
Tetrachloroethene	0.034	0.46	0.23	3.1

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	98	70-130

eurofins | Air Toxics

Client Sample ID: A-10

Lab ID#: 1301126R1-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e011415simr1**	**Date of Collection: 1/3/13**	
Dil. Factor:	**1.64**	**Date of Analysis: 1/14/13 08:41 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.042	Not Detected
cis-1,2-Dichloroethene	0.033	Not Detected	0.13	Not Detected
Trichloroethene	0.033	0.040	0.18	0.22
Tetrachloroethene	0.033	0.47	0.22	3.2

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	99	70-130

eurofins | Air Toxics

Client Sample ID: A-3

Lab ID#: 1301126R1-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e011416simr1**	**Date of Collection: 1/3/13**	
Dil. Factor:	**1.68**	**Date of Analysis: 1/14/13 09:29 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.017	Not Detected	0.043	Not Detected
cis-1,2-Dichloroethene	0.034	Not Detected	0.13	Not Detected
Trichloroethene	0.034	Not Detected	0.18	Not Detected
Tetrachloroethene	0.034	Not Detected	0.23	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	98	70-130

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1301126R1-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e011408sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/14/13 02:08 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	97	70-130

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1301126R1-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e011402sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/14/13 09:10 AM**	

Compound	%Recovery
Vinyl Chloride	98
cis-1,2-Dichloroethene	96
Trichloroethene	76
Tetrachloroethene	82

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	105	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1301126R1-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e011404sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/14/13 10:53 AM**	

Compound	**%Recovery**
Vinyl Chloride	85
cis-1,2-Dichloroethene	94
Trichloroethene	76
Tetrachloroethene	80

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	104	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1301126R1-07AA

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e011405sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/14/13 11:48 AM**	

Compound	**%Recovery**
Vinyl Chloride	85
cis-1,2-Dichloroethene	93
Trichloroethene	75
Tetrachloroethene	79

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	102	70-130

LEVEL III Data Validation Report

PROJECT: Technichem

LABORATORY: Moore Twining Associates

LAB NUMBER: 3A08014

SAMPLES: GW-7, GW-6, GW-5, GW-4, GW-8, GW-12, GW-90, RB-1

MATRIX: Water

Analysis	Volatile Organic Compounds 8260B
Holding Time	✓
Surrogate Recovery	✓
MS/MSD (GW-8)	✓
LCS (Blank Spike)	✓
Method Blanks	✓
Field Duplicates (GW-12 and GW-90)	✓
Trip/Equipment Blanks	✓
Reporting Limits	✓

✓ – QC criteria were met.

Note: None.

Summary:

Based on this Level III validation, these data are usable for their intended purpose. None of these data were qualified or rejected.

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

January 15, 2013

Work Order #: 3A08014

Iain Baker
URS
1 Montgomery Street, Suite 900
San Francisco, CA 94104

RE: Technichem

Enclosed are the analytical results for samples received by our laboratory on 01/08/13 . For your reference, these analyses have been assigned laboratory work order number 3A08014 .

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

Lisa Montijo
Client Services Assistant

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW-7	3A08014-01	Water	01/04/13 10:40	01/08/13 10:45
GW-6	3A08014-02	Water	01/04/13 11:24	01/08/13 10:45
GW-5	3A08014-03	Water	01/04/13 12:35	01/08/13 10:45
GW-4	3A08014-04	Water	01/04/13 13:15	01/08/13 10:45
GW-8	3A08014-05	Water	01/04/13 14:15	01/08/13 10:45
GW-12	3A08014-06	Water	01/04/13 15:10	01/08/13 10:45
GW-90	3A08014-07	Water	01/04/13 15:20	01/08/13 10:45
RB-1	3A08014-08	Water	01/04/13 15:30	01/08/13 10:45
Trip Blank	3A08014-09	Water	01/04/13 00:00	01/08/13 10:45

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-7

3A08014-01 (Water) Sampled:01/04/13 10:40

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Dichlorodifluoromethane (CFC-12)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl chloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethanol		ND	50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon disulfide		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Iodomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrolein		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methylene chloride		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetone		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butyl alcohol (TBA)		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetonitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl acetate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2,2-Dichloropropane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroform		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon tetrachloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Butanone (MEK)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isobutyl alcohol		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Propionitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-7

3A08014-01 (Water) Sampled:01/04/13 10:40

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Tert-Amyl Methyl Ether (TAME)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Benzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methacrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichloroethene (TCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromomethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromodichloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl Methacrylate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chloroethylvinyl ether		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Toluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tetrachloroethene (PCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2-Trichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl methacrylate		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Hexanone		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1,2-Tetrachloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
m,p-Xylene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
o-Xylene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Styrene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromoform		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isopropylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Propylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-7

3A08014-01 (Water) Sampled:01/04/13 10:40

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
1,3,5-Trimethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trimethylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
sec-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
p-Isopropyltoluene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,4-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trichlorobenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachlorobutadiene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Naphthalene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Xylenes		ND	2.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Surrogate: 4-Bromofluorobenzene		*100 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Dibromofluoromethane		*103 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Toluene-d8		*103 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-6

3A08014-02 (Water) Sampled:01/04/13 11:24

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Dichlorodifluoromethane (CFC-12)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl chloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethanol		ND	50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon disulfide		**1.2**	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Iodomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrolein		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methylene chloride		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetone		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butyl alcohol (TBA)		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetonitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl acetate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2,2-Dichloropropane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroform		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon tetrachloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Butanone (MEK)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isobutyl alcohol		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Propionitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-6

3A08014-02 (Water) Sampled:01/04/13 11:24

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Benzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methacrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichloroethene (TCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromomethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromodichloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl Methacrylate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chloroethylvinyl ether		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Toluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tetrachloroethene (PCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2-Trichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl methacrylate		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Hexanone		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1,2-Tetrachloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
m,p-Xylene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
o-Xylene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Styrene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromoform		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isopropylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Propylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-6

3A08014-02 (Water) Sampled:01/04/13 11:24

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
2-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trimethylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
sec-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
p-Isopropyltoluene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,4-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trichlorobenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachlorobutadiene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Naphthalene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Xylenes		ND	2.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Surrogate: 4-Bromofluorobenzene		*98.0 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Dibromofluoromethane		*102 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Toluene-d8		*103 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-5

3A08014-03 (Water) Sampled:01/04/13 12:35

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Dichlorodifluoromethane (CFC-12)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl chloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethanol		ND	50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon disulfide		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Iodomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrolein		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methylene chloride		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetone		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butyl alcohol (TBA)		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetonitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl acetate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2,2-Dichloropropane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroform		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon tetrachloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Butanone (MEK)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isobutyl alcohol		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Propionitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-5

3A08014-03 (Water) Sampled:01/04/13 12:35

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Tert-Amyl Methyl Ether (TAME)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Benzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methacrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichloroethene (TCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromomethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromodichloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl Methacrylate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chloroethylvinyl ether		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Toluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tetrachloroethene (PCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2-Trichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl methacrylate		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Hexanone		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1,2-Tetrachloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
m,p-Xylene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
o-Xylene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Styrene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromoform		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isopropylbenzene		**5.2**	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Propylbenzene		**2.3**	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-5

3A08014-03 (Water) Sampled:01/04/13 12:35

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
2-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butylbenzene		**2.6**	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trimethylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
sec-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
p-Isopropyltoluene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,4-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trichlorobenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachlorobutadiene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Naphthalene		**2.8**	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Xylenes		ND	2.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Surrogate: 4-Bromofluorobenzene		*104 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Toluene-d8		*103 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-4

3A08014-04 (Water) Sampled:01/04/13 13:15

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Dichlorodifluoromethane (CFC-12)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl chloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethanol		ND	50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon disulfide		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Iodomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrolein		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methylene chloride		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetone		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butyl alcohol (TBA)		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetonitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl acetate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2,2-Dichloropropane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroform		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon tetrachloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Butanone (MEK)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isobutyl alcohol		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Propionitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-4

3A08014-04 (Water) Sampled:01/04/13 13:15

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Tert-Amyl Methyl Ether (TAME)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Benzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methacrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichloroethene (TCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromomethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromodichloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl Methacrylate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chloroethylvinyl ether		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Toluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tetrachloroethene (PCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2-Trichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl methacrylate		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Hexanone		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1,2-Tetrachloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
m,p-Xylene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
o-Xylene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Styrene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromoform		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isopropylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Propylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-4

3A08014-04 (Water) Sampled:01/04/13 13:15

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
1,3,5-Trimethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trimethylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
sec-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
p-Isopropyltoluene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,4-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trichlorobenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachlorobutadiene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Naphthalene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Xylenes		ND	2.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Surrogate: 4-Bromofluorobenzene		*97.0 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Dibromofluoromethane		*102 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Toluene-d8		*102 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-8

3A08014-05 (Water) Sampled:01/04/13 14:15

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Dichlorodifluoromethane (CFC-12)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl chloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethanol		ND	50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon disulfide		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Iodomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrolein		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methylene chloride		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetone		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butyl alcohol (TBA)		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetonitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl acetate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,2-Dichloroethene		**0.98**	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2,2-Dichloropropane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroform		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon tetrachloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Butanone (MEK)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isobutyl alcohol		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Propionitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-8

3A08014-05 (Water) Sampled:01/04/13 14:15

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Benzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methacrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichloroethene (TCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromomethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromodichloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl Methacrylate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chloroethylvinyl ether		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Toluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tetrachloroethene (PCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2-Trichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl methacrylate		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Hexanone		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1,2-Tetrachloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
m,p-Xylene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
o-Xylene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Styrene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromoform		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isopropylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Propylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-8

3A08014-05 (Water) Sampled:01/04/13 14:15

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
2-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trimethylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
sec-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
p-Isopropyltoluene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,4-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trichlorobenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachlorobutadiene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Naphthalene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Xylenes		ND	2.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Surrogate: 4-Bromofluorobenzene		*97.4 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Dibromofluoromethane		*102 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Toluene-d8		*99.1 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-12

3A08014-06 (Water) Sampled:01/04/13 15:10

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Dichlorodifluoromethane (CFC-12)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl chloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethanol		ND	50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon disulfide		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Iodomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrolein		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methylene chloride		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetone		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butyl alcohol (TBA)		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetonitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl acetate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,2-Dichloroethene		**14**	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2,2-Dichloropropane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroform		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon tetrachloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Butanone (MEK)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isobutyl alcohol		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Propionitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-12

3A08014-06 (Water) Sampled:01/04/13 15:10

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Benzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methacrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichloroethene (TCE)		**16**	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromomethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromodichloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl Methacrylate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chloroethylvinyl ether		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Toluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tetrachloroethene (PCE)		**14**	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2-Trichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl methacrylate		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Hexanone		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1,2-Tetrachloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
m,p-Xylene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
o-Xylene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Styrene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromoform		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isopropylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Propylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

California ELAP Certificate #1371

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-12

3A08014-06 (Water) Sampled:01/04/13 15:10

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
1,2,3-Trichloropropane (123TCP)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trimethylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
sec-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
p-Isopropyltoluene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,4-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trichlorobenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachlorobutadiene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Naphthalene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Xylenes		ND	2.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Surrogate: 4-Bromofluorobenzene		*96.0 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Toluene-d8		*98.2 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-90

3A08014-07 (Water) Sampled:01/04/13 15:20

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Dichlorodifluoromethane (CFC-12)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl chloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethanol		ND	50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon disulfide		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Iodomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrolein		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methylene chloride		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetone		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butyl alcohol (TBA)		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetonitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl acetate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,2-Dichloroethene		**13**	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2,2-Dichloropropane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroform		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon tetrachloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Butanone (MEK)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isobutyl alcohol		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Propionitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tert-Amyl Methyl Ether (TAME)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-90

3A08014-07 (Water) Sampled:01/04/13 15:20

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Benzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methacrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichloroethene (TCE)		**15**	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromomethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromodichloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl Methacrylate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chloroethylvinyl ether		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Toluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tetrachloroethene (PCE)		**14**	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2-Trichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl methacrylate		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Hexanone		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1,2-Tetrachloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
m,p-Xylene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
o-Xylene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Styrene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromoform		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isopropylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Propylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3,5-Trimethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

GW-90

3A08014-07 (Water) Sampled:01/04/13 15:20

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
1,2,3-Trichloropropane (123TCP)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trimethylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
sec-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
p-Isopropyltoluene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,4-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trichlorobenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachlorobutadiene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Naphthalene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Xylenes		ND	2.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Surrogate: 4-Bromofluorobenzene		*99.6 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Toluene-d8		*103 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

RB-1

3A08014-08 (Water) Sampled:01/04/13 15:30

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Dichlorodifluoromethane (CFC-12)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl chloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethanol		ND	50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon disulfide		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Iodomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrolein		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methylene chloride		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetone		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butyl alcohol (TBA)		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetonitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl acetate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2,2-Dichloropropane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroform		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon tetrachloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Butanone (MEK)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isobutyl alcohol		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Propionitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

RB-1

3A08014-08 (Water) Sampled:01/04/13 15:30

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Tert-Amyl Methyl Ether (TAME)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Benzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methacrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichloroethene (TCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromomethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromodichloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl Methacrylate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chloroethylvinyl ether		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Toluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tetrachloroethene (PCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2-Trichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl methacrylate		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Hexanone		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1,2-Tetrachloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
m,p-Xylene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
o-Xylene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Styrene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromoform		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isopropylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Propylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

RB-1

3A08014-08 (Water) Sampled:01/04/13 15:30

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
1,3,5-Trimethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trimethylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
sec-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
p-Isopropyltoluene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,4-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trichlorobenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachlorobutadiene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Naphthalene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Xylenes		ND	2.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Dibromofluoromethane		*101 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Toluene-d8		*102 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

Trip Blank

3A08014-09 (Water) Sampled:01/04/13 00:00

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Dichlorodifluoromethane (CFC-12)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl chloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorofluoromethane (CFC-11)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethanol		ND	50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichlorotrifluoroethane (CFC-113)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon disulfide		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Iodomethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrolein		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methylene chloride		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetone		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butyl alcohol (TBA)		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl tert-Butyl Ether (MTBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acetonitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Di-isopropyl ether (DIPE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Acrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl tert-Butyl Ether (ETBE)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Vinyl acetate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,2-Dichloroethene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2,2-Dichloropropane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chloroform		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Carbon tetrachloride		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Butanone (MEK)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1-Trichloroethane (TCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isobutyl alcohol		ND	20	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Propionitrile		ND	10	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

Trip Blank

3A08014-09 (Water) Sampled:01/04/13 00:00

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
Tert-Amyl Methyl Ether (TAME)		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Benzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methacrylonitrile		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloroethane (1,2-DCA)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Trichloroethene (TCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromomethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromodichloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Methyl Methacrylate		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chloroethylvinyl ether		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
cis-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Toluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Methyl-2-pentanone (MIBK)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,3-Dichloropropene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Tetrachloroethene (PCE)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2-Trichloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethyl methacrylate		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Dibromochloromethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichloropropane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromoethane (EDB)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Hexanone		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Ethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Chlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,1,2-Tetrachloroethane		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
m,p-Xylene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
o-Xylene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Styrene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromoform		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Isopropylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
trans-1,4-Dichloro-2-butene		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Bromobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Propylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,1,2,2-Tetrachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

URS
1 Montgomery Street, Suite 900
San Francisco CA, 94104

Project: Technichem
Project Number: 28068189
Project Manager: Iain Baker

Reported:
01/15/13 14:29

Trip Blank

3A08014-09 (Water) Sampled:01/04/13 00:00

Analyte	Notes.	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics									
1,3,5-Trimethylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
2-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichloropropane (123TCP)		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
4-Chlorotoluene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
tert-Butylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trimethylbenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
sec-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
p-Isopropyltoluene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,3-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,4-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
n-Butylbenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachloroethane		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)		ND	5.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,4-Trichlorobenzene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Hexachlorobutadiene		ND	1.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Naphthalene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
1,2,3-Trichlorobenzene		ND	0.50	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Xylenes		ND	2.0	µg/L	1	T3A1005	01/10/13	01/10/13	EPA 8260B
Surrogate: 4-Bromofluorobenzene		*98.8 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*
Surrogate: Toluene-d8		*101 %*	*70-130*			*T3A1005*	*01/10/13*	*01/10/13*	*EPA 8260B*

Notes and Definitions

ug/L	micrograms per liter (parts per billion concentration units)
mg/kg	milligrams per kilogram (parts per million concentration units)
mg/L	milligrams per Liter (parts per million concentration units)
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

Analysis of pH, filtration, and residual chlorine is to take place immediately after sampling in the field.
If the test was performed in the laboratory, the hold time was exceeded.

CHAIN OF CUSTODY/ANALYSIS REQUEST

MOORE TWINING ASSOCIATES, INC.
2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

WORK ORDER #: 3A08014
PAGE 1 OF 5

ATTENTION: URS	ATTENTION:	☐ STANDARD FORMAT ☐ WRITE-ON (STATE FORM) ☐ GEOTRACKER/COELT (LUFT) ☐ PDF ☐ SPREADSHEET ☐ County DHS : _____ ☐ Environmental Health Agency : _____ ☐ OTHER: _____
NAME: Iain Baker	NAME:	
ADDRESS: 1 Montgomery St, Ste 900	ADDRESS:	
San Francisco CA 94104		
PHONE: (415) 243-3700	PHONE:	
FAX: iain.baker@urs.com	FAX:	

SAMPLE INFORMATION

SAMPLED BY (PRINT): Kali Futrani-Billet

SIGNATURE:

☐ PUBLIC SYSTEM ☐ ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ REPLACEMENT

TURN AROUND TIME: ☐ RUSH, DUE ON: _____
☒ STANDARD

SAMPLE TYPES:

SOLID:
BS – BIOSOLID
CR – CERAMIC
SL – SOIL/SOLID

LIQUID:
DW – DRINKING WATER
(GW) – GROUND WATER
OL – OIL
SF – SURFACE WATER
ST – STORM WATER
WW – WASTE WATER

PROJECT INFORMATION

CONTRACT/P.O. NO.:

PROJECT: Technichem

PROJECT NUMBER: 28068189

PROJECT MANAGER: Iain Baker

ANALYSIS REQUESTED

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION

	CLIENT SAMPLE ID	DATE	TIME	TYPE	8260B	
1	GW-7	1/4/13	10:40	water	X	
2	GW-6		11:24		X	
3	GW-5		12:35		X	
4	GW-4		13:15		X	
5	GW-8		14:15		X	ms/msp
6	GW-12		15:10		X	
7	GW-90		15:20		X	
~~8~~						
8	RB-1	1/4/13	1530	Water	X	
9	Trip Blank	1/4/13	—	Water	X	

REPORT TO: ☐ INVOICE TO: ☐ REPORT COPY TO: REPORTING:

COMMENTS/ADDITIONAL INSTRUCTIONS:

All samples preserved w/ HCl

MOORE TWINING ASSOCIATES, INC.

ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

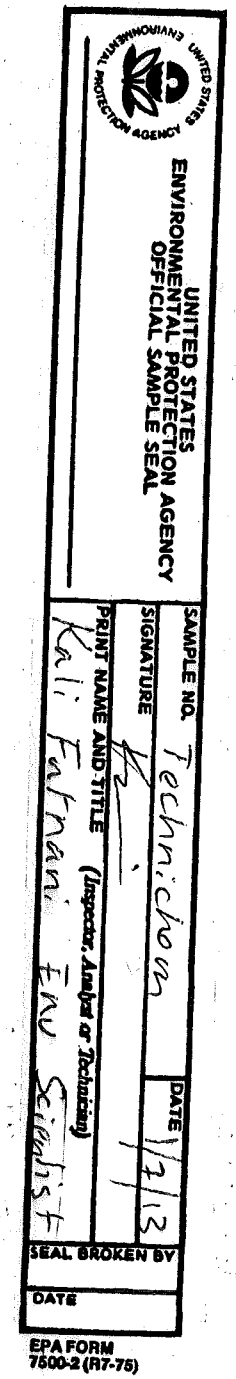
WORK ORDER #: 3A 08014

PAGE 2 OF 5

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
Kali Fatmani	URS	1/7/2013	3pm	Golden State Overnight 3pm #6-50AB10780046	
		1/8/13	1045	Liz Rutt	MTA

Custody Seal intact jem 1/8/13

3 of 5 3A08014



Moore Twining Associates, Inc.

Sample Integrity Page 4 of 5 WO# 3A08014 Date Received: 1/8/13

Section 1-Sampled Same Day

Sample Transport: Walk In MTA Courier Transported In: Ice Chest Box Hand

Has Chilling Begun? Yes No

Section 2-Sampled Previously

Sample Transport: Walk-in UPS (GSO) Fed Ex MTA Courier Other:_____

No. Coolers/Ice Chests: 1 Temperature(s): 1.3

Was Temperature In Range: (Y) or N Received On Ice: Wet (Blue)

Describe type of packing materials: (Bubble Wrap) Foam Packing Peanuts Paper Other:_____

Were ice chest custody seals present? (Y) or N Intact? (Y) or N

Section 3-COC Info.

	Completed			Completed	
	Yes	No		Yes	No
Was COC Received	X		Analysis Requested	X	
Date Sampled	X		Any hold times less than 72hr		X
Time Sampled	X		Client Name	X	
Sample ID	X		Address	X	
Special Storage/Handling Ins.		X	Telephone #	X	

Section 4-Bottles/Analysis

	Yes	No	N/A	Comment
Did all bottles arrive unbroken and intact?	X			
Were bottle custody seals present?		X		
Were bottle custody seals intact?		X		
Did all bottle labels agree with COC?	X			
Were correct containers used for the tests requested?	X			
Was sufficient amount of sample sent for tests indicated?	X			
Were bubbles present in VOA Vials? (Volatiles Methods Only)		X		
Were Ascorbic Acid Bottles Received with VOAs?		X		

Section 5-Comment/Discrepancies

Sample(s) Split/Preserve: Yes or No Container:_____ Preservation:_____ Initials:_____

Filtered: Yes No Container:_____ Preservation:_____ Initials:_____

Was Client Service Supervisor notified of discrepancies: Yes or No N/A Notified by:_____

Explanations/Comments:

Labeled by:_____ Checked by:_____

Sample Integrity Page 5 of 5 WO# 3A08014 MTA Bottles: (Yes) or No

	Plastic 125mL (A)	Plastic 250mL (B)	Plastic 1L (C)	Amber Glass (AG)							
Sample(s) Received	1-4	5	6-8	9							
Bacti 100mL Thiosulfate											
None Preserved Plastic											
HNO3 Plastic											
H2SO4 Plastic											
NaOH Plastic											
300mL DO Bottle											
Other											
Client Own											
1L Plastic NaOH/ZnAc											
250mL (AG) None											
250mL (AG) H2SO4											
250mL (AG) Thio 547, 548											
250mL (AG) Other											
500mL Clear Glass None											
1L (AG) None											
1L (AG) HCl											
1L (AG) Thio 525, 515											
40mL (AG VOA) Thio + K Citrate 531.2											
40mL VOA Vial - HCl	4	12	4	1							
40mL VOA Vial - None											
40mL VOA Vial - H3PO4											
40mL VOA Vial (AG) - thio (THM)											
40mL VOA Vial - Na2SO3 (thio)											
Soil Jar Clear Glass 125mL 250mL 500mL											
THM 40mL VOA None											
Plastic Bag											
Soil Tube											
Tedlar Bags											
Asbestos 1L Plastic											
Gross Alpha/Beta 1L HNO3 each											
Radiological 226/228 1L HNO3 each											
Radon											
Low Level Hg/Metals Double Bag											

LEVEL III Data Validation Report

PROJECT: Technichem

LABORATORY: Moore Twining Associates, Fresno, CA
Subcontracted to BC Laboratories, Inc., Bakersfield, CA

LAB NUMBER: 3C20029

SAMPLES: MW-13, MW-91, Trip Blank

MATRIX: Water

Analysis	Volatile Organic Compounds 8260B
Holding Time	✓
Surrogate Recovery	Note 1
MS/MSD (MW-13)	Note 2
LCS (Blank Spike)	✓
Method Blanks	✓
Duplicates (MW-13 and MW-91)	✓
Trip Blanks	✓
Reporting Limits	Notes 3, 4

✓ – QC criteria were met.

Notes:

1. In the case of the Trip Blank, the surrogate, 1,2-dichloroethene-d4, was recovered above (133%) the QC acceptance range of 75% to 125%. Since no target compounds were reported in the sample, no action was required.

2. The RPD between the reported concentration of chloroethane in the spiked sample (MW-13) of 41.3% exceeded the QC limit of 20%. Chloroethane was not reported in sample MW-13, and no action was taken.

3. Samples MW-13 and MW-91 were re-analyzed at a dilution by factors of 100 and 250, respectively, in order to quantitate tetrachloroethene. The reporting limits were increased by the same factor as the dilution. The reported concentrations exceeded the elevated reporting limits.

4. Concentrations between the MDL And the PQL were flagged "J," estimated.

Summary:

Based on this Level III validation, these data are usable, as qualified, for their intended purpose. None of these data were rejected.

MOORE TWINING ASSOCIATES, INC.

2527 Fresno Street
Fresno, CA 93721
Office: (559) 268-7021
Fax: (559) 268-0740

California ELAP Certificate #1371

Analytical Chemistry Division

April 25, 2013

Work Order #: 3C20029
AMENDED REPORT

Kali Futnani
URS San Francisco
1 Montgomery Way, Suite 900
San Francisco, CA 94104

RE: Technichem

Enclosed are the analytical results for samples received by our laboratory on 3/20/2013. For your reference, these analyses have been assigned laboratory work order number 3C20029.

Please find enclosed the official letter of documentation for the EPA 8260 analysis from the subcontracted laboratory, which was received at our laboratory on 4/25/13.

All analyses have been performed according to our subcontractor laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results only apply to samples analyzed.

If you have any questions, Please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

Julio Morales
Client Services Supervisor

AMENDED REPORT: Per client's request, sample IDs were changed. JCM 4/25/13

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 04/25/2013

Julio Morales

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Project: Water Samples
BC Work Order: 1305963
Invoice ID: B142811

Enclosed are the results of analyses for samples received by the laboratory on 3/26/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton
Client Service Rep

Authorized Signature

Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form 3
Laboratory / Client Sample Cross Reference 5

Sample Results

1305963-01 - 3C20029-01-GW-13

Volatile Organic Analysis (EPA Method 8260) 6

1305963-02 - 3C20029-02-GW-91

Volatile Organic Analysis (EPA Method 8260) 9

1305963-03 - 3C20029-03-Trip Blank

Volatile Organic Analysis (EPA Method 8260) 12

Quality Control Reports

Volatile Organic Analysis (EPA Method 8260)

Method Blank Analysis 15
Laboratory Control Sample 17
Precision and Accuracy 18

Notes

Notes and Definitions 19

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Chain of Custody and Cooler Receipt Form for 1305963 Page 1 of 2

MOORE TWINING SUBCONTRACT ORDER - Purchase Order # 18347

MTA Project #3C20029

California ELAP Certification # 1371

Please reference these numbers on all reports and invoices:

E1305963 **We also request QC data be provided with final report.**

SENDING LABORATORY:	RECEIVING LABORATORY:
Moore Twining Associates, Inc.	BC Laboratories, Inc.
2527 Fresno Street	4100 Atlas Court
Fresno, CA 93721	Bakersfield, CA 93308
Phone: (559) 268-7021	Phone :(800) 878-4911
Fax: (559) 268-0740	Fax: (661) 327-1918
Project Manager: Julio Morales	

Sample Comments

Client Sample ID#: MW-13 -1

MS/MSD

MTA Sample ID: 3C20029-01 Matrix: Water Sampled: 03/18/13 11:15 **Report Due to Client: 04/03/13**

Requested Analysis: 8260B Twining Holding time expires: 04/01/13 11:15 MS/MSD

Containers Supplied:

Client Sample ID#: MW-91 -2

MTA Sample ID: 3C20029-02 Matrix: Water Sampled: 03/18/13 11:00 **Report Due to Client: 04/03/13**

Requested Analysis: 8260B Twining Holding time expires: 04/01/13 11:00

Containers Supplied:

Client Sample ID#: Trip Blank -3

MTA Sample ID: 3C20029-03 Matrix: Water Sampled: 03/20/13 00:00 **Report Due to Client: 04/03/13**

Requested Analysis: 8260B Twining Holding time expires: 04/03/13 00:00

Containers Supplied:

CHK BY DISTRIBUTION SUB-OUT

Released By	Date	Received By	Date
[signature]	03/25/13	Nam Chung	3/26/13 10:10

Please fax copy of receipt with your assigned sample ID number to (559) 268-0740 Page 1 of 1

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1305963 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 1 Of 1

Submission #: 1305963

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☒ (Specify) GSO

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)

Refrigerant: Ice ☐ Blue Ice ☒ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

☒ COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Amb Thermometer ID: 207 Date/Time 3/26/13

Temperature: (A) 10.5 °C / (C) 10.4 MM 3/26 Analyst Init 10:00

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT FE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK			A01							
40ml VOA VIAL	A19	A13								
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:
Sample Numbering Completed By: RAR Date/Time: 3/26/13 @ 1104
A = Actual / C = Corrected

I:\S:\MyDOCS\WordPerfect\LAB_DOCS\FORMS\SAMRECR13I

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1305963-01	COC Number:	---	Receive Date:	03/26/2013 10:00
	Project Number:	---	Sampling Date:	03/18/2013 11:15
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	3C20029-01-GW-13	Lab Matrix:	Water
	Sampled By:	---	Sample Type:	Water
1305963-02	COC Number:	---	Receive Date:	03/26/2013 10:00
	Project Number:	---	Sampling Date:	03/18/2013 11:00
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	3C20029-02-GW-91	Lab Matrix:	Water
	Sampled By:	---	Sample Type:	Water
1305963-03	COC Number:	---	Receive Date:	03/26/2013 10:00
	Project Number:	---	Sampling Date:	03/20/2013 00:00
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	3C20029-03-Trip Blank	Lab Matrix:	Water
	Sampled By:	---	Sample Type:	Water

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1305963-02 | **Client Sample Name:** 3C20029-02-GW-91, 3/18/2013 11:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260B	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	**0.17** J	**ug/L**	**0.50**	**0.072**	**EPA-8260B**	ND	J	1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.082	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	**21**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260B	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1305963-01 | **Client Sample Name:** 3C20029-01-GW-13, 3/18/2013 11:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	03/27/13	03/27/13 19:26	KEA	HPCHEM	1	BWC1904
2	EPA-8260B	03/27/13	03/29/13 02:45	KEA	HPCHEM	100	BWC1904

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1305963-01 | **Client Sample Name:** 3C20029-01-GW-13, 3/18/2013 11:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
tert-Butylbenzene	**0.13 J**	**ug/L**	**0.50**	**0.13**	**EPA-8260B**	ND	J	1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260B	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	**0.19 J**	**ug/L**	**0.50**	**0.072**	**EPA-8260B**	ND	J	1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	**21**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND		1
trans-1,2-Dichloroethene	**0.17 J**	**ug/L**	**0.50**	**0.15**	**EPA-8260B**	ND	J	1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260B	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1305963-01 | **Client Sample Name:** 3C20029-01-GW-13, 3/18/2013 11:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	**0.62**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Isopropylbenzene	**2.0**	**ug/L**	**0.50**	**0.14**	**EPA-8260B**	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1
n-Propylbenzene	**0.36** J	**ug/L**	**0.50**	**0.11**	**EPA-8260B**	ND	J	1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	**9900**	**ug/L**	**50**	**13**	**EPA-8260B**	ND	A01	2
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Trichloroethene	**42**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.5**	**ug/L**	**0.50**	**0.15**	**EPA-8260B**	ND		1
1,2,4-Trimethylbenzene	**1.0**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND		1
1,3,5-Trimethylbenzene	**0.51**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND		1
Vinyl chloride	**6.8**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND		1
Total Xylenes	**1.4**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND		1
p- & m-Xylenes	**0.74**	**ug/L**	**0.50**	**0.28**	**EPA-8260B**	ND		1
o-Xylene	**0.68**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	119	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	93.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			2

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1305963-02 | **Client Sample Name:** 3C20029-02-GW-91, 3/18/2013 11:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	**0.53**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Isopropylbenzene	**1.8**	**ug/L**	**0.50**	**0.14**	**EPA-8260B**	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1
n-Propylbenzene	**0.32 J**	**ug/L**	**0.50**	**0.11**	**EPA-8260B**	ND	J	1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	**12000**	**ug/L**	**120**	**32**	**EPA-8260B**	ND	A01	2
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Trichloroethene	**42**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.2**	**ug/L**	**0.50**	**0.15**	**EPA-8260B**	ND		1
1,2,4-Trimethylbenzene	**0.99**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND		1
1,3,5-Trimethylbenzene	**0.46 J**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND	J	1
Vinyl chloride	**7.2**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND		1
Total Xylenes	**1.3**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND		1
p- & m-Xylenes	**0.71**	**ug/L**	**0.50**	**0.28**	**EPA-8260B**	ND		1
o-Xylene	**0.58**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	122	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	92.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			2

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1305963-02 | **Client Sample Name:** 3C20029-02-GW-91, 3/18/2013 11:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	105	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	03/27/13	03/27/13 19:01	KEA	HPCHEM	1	BWC1904
2	EPA-8260B	03/27/13	03/29/13 11:38	KEA	HPCHEM	250	BWC1904

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1305963-03 | **Client Sample Name:** 3C20029-03-Trip Blank, 3/20/2013 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260B	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260B	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1305963-03 | **Client Sample Name:** 3C20029-03-Trip Blank, 3/20/2013 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260B	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260B	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	133	%	75 - 125 (LCL - UCL)		EPA-8260B		S09	1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1305963-03 | **Client Sample Name:** 3C20029-03-Trip Blank, 3/20/2013 12:00:00AM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	03/27/13	03/27/13 18:36	KEA	HPCHEM	1	BWC1904

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWC1904						
Benzene	BWC1904-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWC1904-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWC1904-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWC1904-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWC1904-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWC1904-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWC1904-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWC1904-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWC1904-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWC1904-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWC1904-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWC1904-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWC1904-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWC1904-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWC1904-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWC1904-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWC1904-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWC1904-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWC1904-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWC1904-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWC1904-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWC1904-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWC1904-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWC1904-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWC1904-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWC1904-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWC1904-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWC1904-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWC1904-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWC1904-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWC1904-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWC1904-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWC1904-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWC1904-BLK1	ND	ug/L	0.50	0.14	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWC1904						
trans-1,3-Dichloropropene	BWC1904-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWC1904-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWC1904-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWC1904-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWC1904-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWC1904-BLK1	ND	ug/L	1.0	0.48	
Methyl t-butyl ether	BWC1904-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWC1904-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWC1904-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWC1904-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWC1904-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWC1904-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWC1904-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWC1904-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWC1904-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWC1904-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWC1904-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWC1904-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWC1904-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWC1904-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWC1904-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWC1904-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWC1904-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWC1904-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWC1904-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BWC1904-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BWC1904-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWC1904-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWC1904-BLK1	114	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWC1904-BLK1	102	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWC1904-BLK1	103	%	80 - 120 (LCL - UCL)		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWC1904										
Benzene	BWC1904-BS1	LCS	23.500	25.000	ug/L	94.0		70 - 130		
Bromodichloromethane	BWC1904-BS1	LCS	24.130	25.000	ug/L	96.5		70 - 130		
Chlorobenzene	BWC1904-BS1	LCS	24.200	25.000	ug/L	96.8		70 - 130		
Chloroethane	BWC1904-BS1	LCS	23.500	25.000	ug/L	94.0		70 - 130		
1,4-Dichlorobenzene	BWC1904-BS1	LCS	22.770	25.000	ug/L	91.1		70 - 130		
1,1-Dichloroethane	BWC1904-BS1	LCS	24.580	25.000	ug/L	98.3		70 - 130		
1,1-Dichloroethene	BWC1904-BS1	LCS	24.650	25.000	ug/L	98.6		70 - 130		
Toluene	BWC1904-BS1	LCS	24.600	25.000	ug/L	98.4		70 - 130		
Trichloroethene	BWC1904-BS1	LCS	24.060	25.000	ug/L	96.2		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWC1904-BS1	LCS	10.710	10.000	ug/L	107		75 - 125		
Toluene-d8 (Surrogate)	BWC1904-BS1	LCS	10.620	10.000	ug/L	106		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWC1904-BS1	LCS	10.580	10.000	ug/L	106		80 - 120		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates
2527 Fresno Street
Fresno, CA 93720

Reported: 04/25/2013 13:18
Project: Water Samples
Project Number: 3C20029
Project Manager: Julio Morales

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWC1904	Used client sample: Y - Description: 3C20029-01-GW-13, 03/18/2013 11:15										
Benzene	MS	1305963-01	ND	23.100	25.000	ug/L		92.4		70 - 130	
	MSD	1305963-01	ND	25.770	25.000	ug/L	10.9	103	20	70 - 130	
Bromodichloromethane	MS	1305963-01	ND	18.330	25.000	ug/L		73.3		70 - 130	
	MSD	1305963-01	ND	21.130	25.000	ug/L	14.2	84.5	20	70 - 130	
Chlorobenzene	MS	1305963-01	ND	20.090	25.000	ug/L		80.4		70 - 130	
	MSD	1305963-01	ND	22.120	25.000	ug/L	9.6	88.5	20	70 - 130	
Chloroethane	MS	1305963-01	ND	15.330	25.000	ug/L		61.3		70 - 130	Q03
	MSD	1305963-01	ND	23.320	25.000	ug/L	41.3	93.3	20	70 - 130	Q02
1,4-Dichlorobenzene	MS	1305963-01	ND	20.460	25.000	ug/L		81.8		70 - 130	
	MSD	1305963-01	ND	21.840	25.000	ug/L	6.5	87.4	20	70 - 130	
1,1-Dichloroethane	MS	1305963-01	ND	22.140	25.000	ug/L		88.6		70 - 130	
	MSD	1305963-01	ND	25.660	25.000	ug/L	14.7	103	20	70 - 130	
1,1-Dichloroethene	MS	1305963-01	ND	22.840	25.000	ug/L		91.4		70 - 130	
	MSD	1305963-01	ND	25.790	25.000	ug/L	12.1	103	20	70 - 130	
Toluene	MS	1305963-01	ND	20.520	25.000	ug/L		82.1		70 - 130	
	MSD	1305963-01	ND	22.310	25.000	ug/L	8.4	89.2	20	70 - 130	
Trichloroethene	MS	1305963-01	42.240	64.830	25.000	ug/L		90.4		70 - 130	
	MSD	1305963-01	42.240	66.260	25.000	ug/L	5.2	104	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1305963-01	ND	10.300	10.000	ug/L		103		75 - 125	
	MSD	1305963-01	ND	10.140	10.000	ug/L	1.6	101		75 - 125	
Toluene-d8 (Surrogate)	MS	1305963-01	ND	9.5300	10.000	ug/L		95.3		80 - 120	
	MSD	1305963-01	ND	9.5600	10.000	ug/L	0.3	95.6		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1305963-01	ND	10.300	10.000	ug/L		103		80 - 120	
	MSD	1305963-01	ND	10.100	10.000	ug/L	2.0	101		80 - 120	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Moore-Twining Associates	**Reported:** 04/25/2013 13:18
2527 Fresno Street	Project: Water Samples
Fresno, CA 93720	Project Number: 3C20029
	Project Manager: Julio Morales

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

MOORE TWINING ASSOCIATES, INC.

ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

WORK ORDER #: 3C20029

PAGE 1 OF 3

ATTENTION: URS	ATTENTION:	☒ STANDARD FORMAT
NAME: Kali Futrani	NAME:	☐ WRITE-ON (STATE FORM)
ADDRESS: One Montgomery Suite 900	ADDRESS:	☐ GEOTRACKER/COELT (LUFT)
SFCA 94104		☐ PDF ☒ SPREADSHEET
PHONE: 45-243-3878	PHONE:	☐ County DHS :
FAX:	FAX:	☐ Environmental Health Agency :
		☐ OTHER:

SAMPLE INFORMATION

SAMPLED BY (PRINT): Kali Futrani

SIGNATURE:

☐ PUBLIC SYSTEM ☐ ROUTINE
☒ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ SPECIAL

TURN AROUND TIME: ☐ RUSH, DUE ON: _____
☒ STANDARD

SAMPLE TYPES:

SOLID:
BS - BIOSOLID
CR - CERAMIC
SL - SOIL/SOLID

LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW - WASTE WATER

G=Grab, C=Composite

PROJECT INFORMATION

CONTRACT/P.O. NO.:

PROJECT: Technichem

PROJECT NUMBER: 28068189

PROJECT MANAGER: Ros Garner

ANALYSIS REQUESTED

NOTES ON RECEIVED CONDITION:

☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED

☒ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION

3C, Fedex

LAB USE	CLIENT SAMPLE ID	DATE	TIME	TYPE	8260B VOCs	
1	MW-13	3/18/13	11:15	water	X	ms/msd
2	MW-91	3/18/13	11:00	water	X	
3	TB-1	3/18/13	NA		X	

REPORT TO: ☐ INVOICE TO: ☐ REPORT COPY TO: REPORTING:

COMMENTS/ADDITIONAL INSTRUCTIONS:

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
Kali Futrani	URS	3/18/13	5pm		
		3/20/13	1030		MTA

Moore Twining Associates, Inc.

Sample Integrity Page 2 of 3 WO# 3C20029 Date Received: 3/20/13

Section 1-Sampled Same Day

Sample Transport: Walk In MTA Courier Transported In: Ice Chest Box Hand

Has Chilling Begun? Yes No

Section 2-Sampled Previously

Sample Transport: Walk-in UPS GSO (Fed Ex) MTA Courier Other:_____

No. Coolers/Ice Chests: 1 Temperature(s): 3° C

Was Temperature In Range: (Y) or N Received On Ice: (Wet) Blue

Describe type of packing materials: Bubble Wrap Foam Packing Peanuts Paper Other:_____

Were ice chest custody seals present? Y or N Intact? Y or N

Section 3-COC Info.

	Completed			Completed	
	Yes	No		Yes	No
Was COC Received	X		Analysis Requested	X	
Date Sampled	X		Any hold times less than 72hr		X
Time Sampled	X		Client Name	X	
Sample ID	X		Address	X	
Special Storage/Handling Ins.		X	Telephone #	X	

Section 4-Bottles/Analysis

	Yes	No	N/A	Comment
Did all bottles arrive unbroken and intact?	X			
Were bottle custody seals present?		X		
Were bottle custody seals intact?		X		
Did all bottle labels agree with COC?	X			
Were correct containers used for the tests requested?	X			
Was sufficient amount of sample sent for tests indicated?	X			
Were bubbles present in VOA Vials? (Volatiles Methods Only)		X		
Were Ascorbic Acid Bottles Received with VOAs?		X		

Section 5-Comment/Discrepancies

Sample(s) Split/Preserve: Yes or No Container:_____ Preservation:_____ Initials:_____

Filtered: Yes No Container:_____ Preservation:_____ Initials: _____

Was Client Service Supervisor notified of discrepancies: Yes or No N/A Notified by:_____

Explanations/Comments:

Labeled by:_____ Checked by:_____

Moore Twining Associates, Inc.

Sample Integrity Page 3 of 3 WO# 3C20089 MTA Bottles: Yes or No

Plastic 125mL (A) Plastic 250mL (B) Plastic 1L (C) Amber Glass (AG)

Sample(s) Received	1	2	3								
Bacti 100mL Thiosulfate											
None Preserved Plastic											
HNO3 Plastic											
H2SO4 Plastic											
NaOH Plastic											
300mL DO Bottle											
Other											
Client Own											
1L Plastic NaOH/ZnAc											
250mL (AG) None											
250mL (AG) H2SO4											
250mL (AG) Thio 547, 548											
250mL (AG) Other											
500mL Clear Glass None											
1L (AG) None											
1L (AG) HCl											
1L (AG) Thio 525, 515											
40mL (AG VOA) Thio + K Citrate 531.2											
40mL VOA Vial - HCl	9	3	1								
40mL VOA Vial - None											
40mL VOA Vial - H3PO4											
40mL VOA Vial (AG) - thio (THM)											
40mL VOA Vial - Na2SO3 (thio)											
Soil Jar Clear Glass 125mL 250mL 500mL											
THM 40mL VOA None											
Plastic Bag											
Soil Tube											
Tedlar Bags											
Asbestos 1L Plastic											
Gross Alpha/Beta 1L HNO3 each											
Radiological 226/228 1L HNO3 each											
Radon											
Low Level Hg/Metals Double Bag											

2340 Stock Creek Blvd.
Rockford TN 37853-3044
Phone: (865) 573-8188
Fax: (865) 573-8133
Email: info@microbe.com

Client: Kali Futnani
URS Corp
1 Montgomery St
Suite 900
San Francisco, CA 94104

Phone: 415-243-3878

Fax:

Identifier: 063KC **Date Rec:** 03/19/2013 **Report Date:** 03/22/2013

Client Project #: 28068189 **Client Project Name:** Technichem

Purchase Order #:

Analysis Requested: CENSUS

Reviewed By:



NOTICE: This report is intended only for the addressee shown above and may contain confidential or privileged information. If the recipient of this material is not the intended recipient or if you have received this in error, please notify Microbial Insights, Inc. immediately. The data and other information in this report represent only the sample(s) analyzed and are rendered upon condition that it is not to be reproduced without approval from Microbial Insights, Inc. Thank you for your cooperation.

MICROBIAL INSIGHTS, INC.

2340 Stock Creek Blvd. Rockford, TN 37853-3044
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **URS Corp**
Project: Technichem

MI Project Number: **063KC**
Date Received: 03/19/2013

Sample Information

Client Sample ID:	**MW-13**
Sample Date:	03/18/2013
Units:	cells/mL
Analyst:	RW

Dechlorinating Bacteria

Dehalococcoides	*DHC*	<2.80E+00

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 03/05/2013 By jamesy

Permit Numbers: W2013-0158
Permits Valid from 03/08/2013 to 03/08/2013

Application Id: 1362004949156 **City of Project Site:** Emeryville
Site Location: 4245 Halleck Street
Project Start Date: 03/08/2013 **Completion Date:** 03/08/2013
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Applicant: URS - Kali Futnani-Billet **Phone:** 415-243-3878
One Montgomery Street, Suite 900, San Francisco, CA 94014
Property Owner: Mario and Virginia Pellegrini **Phone:** --
4245 Halleck Street, Emeryville, CA 94608
Client: ** same as Property Owner **

Receipt Number:
Total Due: $265.00
Total Amount Paid: $0.00
Payment Type: EXMPT **PAYMENT EXEMPT**

Works Requesting Permits:

Remediation Well Construction-Extraction - 1 Wells
Driller: Penecore - Lic #: 906899 - Method: hstem **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2013-0158	03/05/2013	06/06/2013	GW-13	6.00 in.	2.00 in.	15.00 ft	25.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

5. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Minimum seal depth (Neat Cement Seal) is 2 feet below ground surface (BGS).

7. Minimum surface seal thickness is two inches of cement grout placed by tremie.

8. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

9. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

APPENDIX D
ALAMEDA COUNTRY PUBLIC WORKS
WELL INSTALLATION PERMIT

http://www.epa.gov/epawaste/hazard/testmethods/index.htm
Last updated on 2/28/2014

Wastes - Hazardous Waste - Test Methods

Test Methods

This Web site provides resources relating to "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", also known as SW-846. This site contains updates about SW-846 and information about the development and approval process of SW-846 methods.

In support of the Resource Conservation and Recovery Act (RCRA) program, EPA employs analytical chemistry and characteristic testing methodologies, environmental sampling and monitoring, and quality assurance.

- SW-846: EPA Waste's official compendium of analytical and sampling methods that have been evaluated and approved for use in complying with RCRA regulations.
- MICE Service: Answers method-related questions and takes comments on technical issues regarding SW-846 methods.
- The Performance-Based Measurement System (PBMS): Aids in selecting the most effective test method.
- The Implementation of the Performance Approach: The adoption of the Performance Based Measurement System (PBMS) to reduce the cost of monitoring, stimulate the development and use of new, more cost-effective monitoring technologies.
- National Environmental Monitoring Conference (NEMC): The annual conference for RCRA environmental monitoring and waste characterization.
- Methods Development and Approval Process: How to publish a method in SW-846.
- Resources: a number of key publications, links, and answers to frequent questions.

Related Links

- Test Methods Collection
- Validated Methods
- ChemBioFinder EXIT Disclaimer
- Hazardous Waste Clean-Up Information EXIT Disclaimer

Highlighted Resources

- Update V Federal Register Notice (PDF) (9 pp, 219 K)
- For Update V methods visit regulations.gov at docket number EPA-HQ-RCRA-2012-0072 (new link to be added by You)
- SW-846 On-Line
- Waste Sampling Draft Technical Guidance
- Test Methods Frequent Questions
- SW-846 Federal Register Notices (New & Older Methods)
- Methods Innovation Rule (MIR)

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

SOUTHERN PACIFIC TRANSPORTATION COMPANY (T0600101882) - (MAP)

SIGN UP FOR EMAIL ALERTS

1450 SHERWIN
EMERYVILLE, CA 94608
ALAMEDA COUNTY
LUST CLEANUP SITE
PRINTABLE CASE SUMMARY

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP *(LEAD)* - *CASE #: RO0000441*
CASEWORKER: *Jerry Wickham*
SAN FRANCISCO BAY RWQCB (REGION 2) - *CASE #: 01-2037*
CASEWORKER: *Cherie McCaulou*

Regulatory Profile

CLEANUP STATUS - DEFINITIONS

COMPLETED - CASE CLOSED AS OF 1/27/2006 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
HEATING OIL / FUEL OIL

POTENTIAL MEDIA AFFECTED
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)

FILE LOCATION
STORED ELECTRONICALLY AS AN E-FILE

BENEFICIAL USE
GW - MUNICIPAL AND DOMESTIC SUPPLY

DWR GROUNDWATER SUB-BASIN NAME
Santa Clara Valley - East Bay Plain (2-9.04)

RB WATERSHED NAME
Bay Bridges - Berkeley (203.30)

Post Closure Site Management Requirements

DAY CARE CENTER PROHIBITED
ELDER CARE CENTER PROHIBITED
HOSPITAL USE PROHIBITED
NO EXCAVATION OF CONTAMINATED SOILS WITHOUT AGENCY REVIEW AND APPROVAL
NOTIFY PRIOR TO CHANGE IN LAND USE
NOTIFY PRIOR TO DEVELOPMENT
NOTIFY PRIOR TO SUBSURFACE WORK
PERFORM H&S PLAN PRIOR TO SUBSURFACE WORK
PUBLIC OR PRIVATE SCHOOL FOR PERSONS UNDER 21 PROHIBITED
RAISING OF FOOD PROHIBITED
RESIDENCE USE PROHIBITED

Site History

No site history available

Cleanup Action Report

ACTION TYPE	BEGIN DATE	END DATE	PHASE	CONTAMINANT MASS REMOVED	DESCRIPTION
EXCAVATION	10/25/1994	9/25/1995			

Regulatory Activities

* Indicates a revised due date

	ACTION TYPE	ACTION	ACTION DATE	RECEIVED / ISSUE DATE
[VIEW DOCS]	*OTHER REGULATORY ACTIONS*	Closure/No Further Action Letter - #2006-01-27	1/27/2006	1/27/2006
	CLEANUP ACTION	Excavation	10/25/1994	
	LEAK ACTION	Leak Reported	9/1/1994	
	LEAK ACTION	Leak Discovery	8/3/1994	
	LEAK ACTION	Leak Stopped	8/3/1994	

* DENOTES A SUBMITTAL WAS AUTO-RECEIVED

Site Maps and Boring Logs (GEO_MAP and GEO_BORE)

NO SITE MAP SUBMITTALS FOUND FOR THIS FACILITY.

Site Documents

TITLE	TYPE	SUBMITTED BY	DOCUMENT DATE	SIZE
CLOS_L_2006-01-27	CLOSURE/NO FURTHER ACTION LETTER	JERRY WICKHAM (REGULATOR)	1/27/2006	

Monitoring Reports

NO MONITORING REPORT SUBMITTALS FOUND FOR THIS FACILITY.

Copyright © 2015 State of California

0.59375 seconds

STATE WATER RESOURCES CONTROL BOARD
CA.GOV GEOTRACKER

RIFKIN INVESTMENT COMPANY (T0600101139) - (MAP)

SIGN UP FOR EMAIL ALERTS

4525-4549 HORTON STREET
EMERYVILLE, CA 94608
ALAMEDA COUNTY
LUST CLEANUP SITE
ASSOCIATED ENVIROSTOR PROJECTS
PRINTABLE CASE SUMMARY

CLEANUP OVERSIGHT AGENCIES
DEPARTMENT OF TOXIC SUBSTANCES CONTROL *(LEAD)* - *CASE #: 60000189*
ALAMEDA COUNTY LOP - *CASE #: RO0000237*
SAN FRANCISCO BAY RWQCB (REGION 2) - *CASE #: 01-1240*

Regulatory Profile

CLEANUP STATUS - DEFINITIONS

OPEN - SITE ASSESSMENT AS OF 10/28/2010 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
ARSENIC, DIESEL, GASOLINE, HEATING OIL / FUEL OIL, LEAD, STODDARD SOLVENT / MINERAL SPRIITS / DISTILLATES

POTENTIAL MEDIA AFFECTED
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)

FILE LOCATION
STORED ELECTRONICALLY AS AN E-FILE

BENEFICIAL USE
GW - MUNICIPAL AND DOMESTIC SUPPLY

DWR GROUNDWATER SUB-BASIN NAME
Santa Clara Valley - East Bay Plain (2-9.04)

RB WATERSHED NAME
Bay Bridges - Berkeley (20330)

GROUNDWATER MONITORING FREQUENCY
OF WELLS MONITORED - SEMI-ANNUALLY : 10

Site History

No site history available

Regulatory Activities

* Indicates a revised due date

	ACTION TYPE	ACTION	ACTION DATE	RECEIVED / ISSUE DATE
	RESPONSE - OTHER	Electronic Reporting Submittal Due	8/10/2009	8/5/2009
[VIEW DOCS]	*ENFORCEMENT/ORDERS*	Staff Letter - #20090724	7/24/2009	7/24/2009
[VIEW DOCS]	*ENFORCEMENT/ORDERS*	Notice of Violation - #20090724	7/24/2009	7/24/2009
[VIEW DOCS]	*ENFORCEMENT/ORDERS*	Staff Letter - #20080703	7/3/2008	7/3/2008
	LEAK ACTION	Leak Stopped	11/24/1993	
	LEAK ACTION	Leak Discovery	7/8/1988	
	LEAK ACTION	Leak Reported	7/8/1988	

* DENOTES A SUBMITTAL WAS AUTO-RECEIVED

Site Maps and Boring Logs (GEO_MAP and GEO_BORE)

NO SITE MAP SUBMITTALS FOUND FOR THIS FACILITY.

Site Documents

TITLE	TYPE	SUBMITTED BY	DOCUMENT DATE	SIZE
DIR_L_2009_07_24	STAFF LETTER	MARK DETTERMAN (REGULATOR)	7/24/2009	

ENF_REF_L_2009_07_24	NOTICE OF VIOLATION	MARK DETTERMAN (REGULATOR)	7/24/2009
ESI COMPLIANCE DIRECTIVE	STAFF LETTER	DANIEL OLSEN (REGULATOR)	7/3/2008

Monitoring Reports

NO MONITORING REPORT SUBMITTALS FOUND FOR THIS FACILITY.

Copyright © 2015 State of California

0.4375 seconds

STATE WATER RESOURCES CONTROL BOARD
CA.GOV GEOTRACKER

CHROMEX (T0600102202) - (MAP)

SIGN UP FOR EMAIL ALERTS

1400 PARK AVENUE
EMERYVILLE, CA 94608
ALAMEDA COUNTY
LUST CLEANUP SITE
ASSOCIATED ENVIROSTOR PROJECTS
PRINTABLE CASE SUMMARY

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP *(LEAD) - CASE #: RO0000398*
CASEWORKER: *MARK DETTERMAN*
SAN FRANCISCO BAY RWQCB (REGION 2) *- CASE #: 01-2392*
CASEWORKER: *Cherie McCaulou*

Regulatory Profile

CLEANUP STATUS - DEFINITIONS

OPEN - VERIFICATION MONITORING AS OF 1/31/2007 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
DIESEL, GASOLINE, WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING

POTENTIAL MEDIA AFFECTED
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)

FILE LOCATION
STORED ELECTRONICALLY AS AN E-FILE

BENEFICIAL USE
GW - MUNICIPAL AND DOMESTIC SUPPLY

DWR GROUNDWATER SUB-BASIN NAME
Santa Clara Valley - East Bay Plain (2-9.04)

RB WATERSHED NAME
Bay Bridges - Berkeley (20330)

Site History

Chromex ceased operations in January 1991. Facility closure activities started in April 1991, and included the removal of eight ASTs that had been located in either a below-grade concrete vault or an aboveground bermed area. The former below grade concrete vault was removed in April 1992, and 40 tons of soil with elevated metals, including chromium, was also removed. Four soil bores were installed in October 1992 to delineate the extent of chromium impacted soils about the vault and only several of the one foot samples contained metals values over potential regulatory concern. Grab groundwater was successfully collected in three of the four bores, all metals results were acceptable; however, several VOCs were detected and were attributed to offsite sources. In December 1994 six soil bores (SB-1 to SB-6) were installed, and three wells were installed (MW-1 to MW-3). Chromium, hexavalent chrome, and lead were detected in soil or groundwater, but below regulatory concern. HVOCs were also present and were ultimately attributed to offsite sources, with similar concentrations.

As part of the closure activities a vertical honing pit was excavated in July 1995 and 75 cubic yards (112.36 tons) of associated soil were removed. Concentrations up to 870 ppm were left in place due to limitations imposed by the building and the sidewalk. In December 1996 well MW-4 was installed in proximity to the honing pit excavation. Three 550-gallon USTs (two gasoline, one diesel and / or motor oil) were removed in October 1995; existing well MW-1 was also used to monitor groundwater for these USTs. The excavation for these USTs was backfilled with imported soil and contaminated soil disposed of under manifest offsite. In 1997 a half buried AST was abandoned in-place; it may have been utilized for storm water. Well MW-3 was decommissioned under permit in February 1999. The three remaining wells were redeveloped and sampled in January 2007. All hydrocarbon concentrations were non-detectable; however, TPHmo was not analyzed for.

Review of the well network does not appear to support downgradient delineation of a dissolved phase plume, and thus an understanding of the site hydrogeology appears to be inadequate. Wells at the site have not been surveyed to Geotracker standards. Wells MW-1 to MW-3 were originally installed to monitor the toxic portion of this site (Chromium, and other contaminants). Well MW-1 has been located in at least two different locations and is stated to be the well that is used to define the downgradient dissolved phase plume extent.. The most recent depicted position of well MW-1 appears to be west of the former USTs. Depending on the well network available (MW-3 was destroyed under permit) , groundwater is documented to flow to either the northwest or to the south. With either groundwater gradient, the well MW-1 appears to monitor a crossgradient position rather than a downgradient position.

No soil analytical data has been collected for TPH gasoline, BTEX, MTBE, TPH diesel, or TPH motor oil outside the source area, thus a vapor intrusion and direct contact LTCP criterias cannot be evaluated. There are a series of reports that have not been submitted to ACEH or Geotracker. These missing reports are cited in several of the available reports and may be useful to understanding the site.

Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp.

Copyright © 2015 State of California

0.640625 seconds

STATE WATER RESOURCES CONTROL BOARD
CA.GOV GEOTRACKER

CHROMEX (TOXIC) (T06019703624) - (MAP)

SIGN UP FOR EMAIL ALERTS

1400 PARK
EMERYVILLE, CA 94608
ALAMEDA COUNTY
CLEANUP PROGRAM SITE
PRINTABLE CASE SUMMARY

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP *(LEAD)* - *CASE #: RO0002656*
CASEWORKER: *MARK DETTERMAN*
SAN FRANCISCO BAY RWQCB (REGION 2) - *CASE #: NA*

Regulatory Profile

CLEANUP STATUS - DEFINITIONS

OPEN - SITE ASSESSMENT AS OF 3/7/1997 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
CHROMIUM, DIESEL, GASOLINE, HEATING OIL / FUEL OIL, OTHER CHLORINATED HYDROCARBONS, TETRACHLOROETHYLENE (PCE), TRICHLOROETHYLENE (TCE)

POTENTIAL MEDIA AFFECTED
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)

FILE LOCATION
STORED ELECTRONICALLY AS AN E-FILE

BENEFICIAL USE
GW - MUNICIPAL AND DOMESTIC SUPPLY

DWR GROUNDWATER SUB-BASIN NAME
Santa Clara Valley - East Bay Plain (2-9.04)

RB WATERSHED NAME
Bay Bridges - Berkeley (20330)

Site History

Chromex ceased operations in January 1991. Facility closure activities started in April 1991, and included the removal of eight ASTs that had been located in either a below-grade concrete vault or an aboveground bermed area. The former below grade concrete vault was removed in April 1992, and 40 tons of soil with elevated metals, including chromium, was also removed. Four soil bores were installed in October 1992 to delineate the extent of chromium impacted soils about the vault and only several of the one foot samples contained metals values over potential regulatory concern. Grab groundwater was successfully collected in three of the four bores, all metals results were acceptable; however, several VOCs were detected and were attributed to offsite sources. In December 1994 six soil bores (SB-1 to SB-6) were installed, and three wells were installed (MW-1 to MW-3). Chromium, hexavalent chrome, and lead were detected in soil or groundwater, but below regulatory concern. HVOCs were also present and were ultimately attributed to offsite sources, with similar concentrations.

As part of the closure activities a vertical honing pit was excavated in July 1995 and 75 cubic yards (112.36 tons) of associated soil were removed. Concentrations up to 870 ppm were left in place due to limitations imposed by the building and the sidewalk. In December 1996 well MW-4 was installed in proximity to the honing pit excavation. Three 550-gallon USTs (two gasoline, one diesel and / or motor oil) were removed in October 1995; existing well MW-1 was also used to monitor groundwater for these USTs. The excavation for these USTs was backfilled will soil with elevated concentrations. In 1997 a half buried AST was abandoned in-place; it may have been utilized for storm water. Well MW-3 was decommissioned under permit in February 1999. The three remaining wells were redeveloped and sampled in January 2007; all hydrocarbon concentrations were non-detectable.

Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp.

Copyright © 2015 State of California

0.625 seconds

STATE WATER RESOURCES CONTROL BOARD
CA.GOV GEOTRACKER

ELECTRO-COATINGS INC (T0600102145) - (MAP)

SIGN UP FOR EMAIL ALERTS

1401-1421 PARK AVENUE
EMERYVILLE, CA 94608
ALAMEDA COUNTY
LUST CLEANUP SITE
PRINTABLE CASE SUMMARY

CLEANUP OVERSIGHT AGENCIES
SAN FRANCISCO BAY RWQCB (REGION 2) *(LEAD) - CASE #: 01-2333*
CASEWORKER: *MARK JOHNSON*
ALAMEDA COUNTY LOP - *CASE #: RO0000399*

Regulatory Profile

CLEANUP STATUS - DEFINITIONS

OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION AS OF 4/28/2010 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
1,1,1-TRICHLOROETHANE (TCA), CHROMIUM, GASOLINE, KEROSENE, OTHER CHLORINATED HYDROCARBONS, TETRACHLOROETHYLENE (PCE), TRICHLOROETHYLENE (TCE), VINYL CHLORIDE

POTENTIAL MEDIA AFFECTED
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)

FILE LOCATION
STORED ELECTRONICALLY AS AN E-FILE

BENEFICIAL USE
GW - MUNICIPAL AND DOMESTIC SUPPLY

DWR GROUNDWATER SUB-BASIN NAME
Santa Clara Valley - East Bay Plain (2-9.04)

RB WATERSHED NAME
Bay Bridges - Berkeley (20330)

GROUNDWATER MONITORING FREQUENCY
OF WELLS MONITORED - ANNUALLY : 14

Site History

The properties at 1401 and 1421 Park Avenue have been utilized as a metal plating facility since 1952. Electro-Coatings, Inc purchased the business in 1963, including the property at 1401 Park (1421 was a leased portion of the business). Environmental investigations relative to the chromium and nickel plating operations have been on-going since at least August 1977. Volatile Organic Compounds were also utilized at the metals plating facility and are a part of the investigations associated with these operations. An extensive file exists, and active remediation was on-going as of June 2006, and is managed by the RWQCB.

This case is specifically focused on two gasoline USTs that were discovered around February 1995 at the 1421 Park Avenue address. The USTs were abandoned in-place to limit interference to then on-going remedial activities related to the metal plating operations. Four Geoprobe bores were installed in October 1997 to investigate the UST related contamination; however, limited data relative to hydrocarbons has been submitted. No other information related to UST issues has been submitted.

CASE REVIEWS

TITLE / DESCRIPTION	TYPE	REVIEWED BY	DATE REVIEWED	SUMMARY
Path to Closure Plan	Path to Closure Plan	SAN FRANCISCO BAY RWQCB (REGION 2)	12/26/2013	
LTCP Checklist	LTCP Checklist	SAN FRANCISCO BAY RWQCB (REGION 2)	8/13/2013	NEFC
09-42 Closure Review	09-42 Closure Review	ALAMEDA COUNTY LOP	4/22/2010	NEFC

Regulatory Activities * Indicates a revised due date

	ACTION TYPE	ACTION	ACTION DATE	RECEIVED / ISSUE DATE
	RESPONSE - OTHER	Electronic Reporting Submittal Due	8/10/2009	
[VIEW DOCS]	*ENFORCEMENT/ORDERS*	Notice of Violation - #20090724	7/24/2009	7/24/2009
[VIEW DOCS]	*ENFORCEMENT/ORDERS*	Staff Letter - #20090724	7/24/2009	7/24/2009
[VIEW DOCS]	*ENFORCEMENT/ORDERS*	Staff Letter - #20080703	7/3/2008	7/3/2008
	LEAK ACTION	Leak Stopped	7/30/1997	
	LEAK ACTION	Leak Reported	7/30/1997	
	LEAK ACTION	Leak Discovery	5/24/1995	

* DENOTES A SUBMITTAL WAS AUTO-RECEIVED

Site Maps and Boring Logs (GEO_MAP and GEO_BORE)

NO SITE MAP SUBMITTALS FOUND FOR THIS FACILITY.

Site Documents

TITLE	TYPE	SUBMITTED BY	DOCUMENT DATE	SIZE
DIR_L_2009_07_24	STAFF LETTER	MARK DETTERMAN (REGULATOR)	7/24/2009	
ENF_REF_L_2009_07_24	NOTICE OF VIOLATION	MARK DETTERMAN (REGULATOR)	7/24/2009	
ESI COMPLIANCE DIRECTIVE	STAFF LETTER	DANIEL OLSEN (REGULATOR)	7/3/2008	

Monitoring Reports

NO MONITORING REPORT SUBMITTALS FOUND FOR THIS FACILITY.

Copyright © 2015 State of California

0.5 seconds